1,75

# Collectanea Orchidacea.

## VIII

enthält ± 295 Diagnosen

Neue Orchideen d. Flora der Monsun-Gebietes von R. Schlechter.
aus Bull. Herb. Boissier 2m Sér. VI (1906)

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Apostasia parvula Schl. Typ. in herb. Schl. Simplex erecta, pusilla 10-15 cm alta, radicib. filiformib. ramulos: teretib. glabr. Caule stricto, terete, glabro, 2,5 mm diam. basi vaginul. spars. sensim in folia transeuntib. obsesso, laxe foliato, fol. lin.-lanc. acum. brevib. ad 3 cm lg. supra basin ad 2,2 cm lt. erect. glabr. Racemo vulgo simplice, interdum e basi pauciramosa, laxe 4- ad 8-floro, arcuato bracteis lanc. acumin. glabr. ovario 2plo brevioribus, Sep. obl.-ligulat. apiculat. glabr. 4 mm lg. revolut. Pet. similib. basi paulo angustat. apice obtusiuscul. paulo obliqu. sepalis aequilong. revolut. Lab. sepalis simillimo obtusiusculo, aequilongo, revoluto. Col. subsigmoideo curvata, cylindr. glabra, antheris nunc 2 nunc 3 fertilib., staminodio nullo v. subinconspicuo, oblongo-lanceolat. obtusiuscul. Stylo filiformi glabro aequilongis, ovario cylindrico glabro, apice incurvulo, 6 mm longo. — Ost Borneo. In d. Wäldern am Long Gombeng im Staate Koetei. Fl. Augusto (Schl. n. 13562) Blt. hellgelb.

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Platanthera sumatrana Schl.

Erecta, c. 25 cm alta. Fol. radicalia 2 patentib. obl.-elliptic. acut. v. subacut. glabr. basi scapum amplectentib., scapo erecto, substricto, vagin. foliac. erect. acuminat. decrescentib. in bracteas laxe obsesso; spica subdensa 10-15-flora, cylindrac. 4-5 cm lga. bract. lanc. acumin. glabr. flores aequantib. v. paulo excedentib. Sep. interm. ovato-obl. obt. glabro, vix 1/2 mm lgo, concavulo, lateralib. porrecto-patentib. subfalcat. oblique obl.-lanceol. obtusiusc. glabr. intermedio fere aequilong. Pet. porrect. oblique oblongo-lanceol. apicem versus angustatis obtusiusc. sep. fere aequilong. Lab. e basi concava, oblonga 3lobo, lobo intermedio lanceolato, obtusiusculo, lob. lateralib. intermedio longiorib. patentib. oblique lanceolato-ligulatis subacutis, squamella

semiorbicularis supra basin labelli ante ostium calcaris brevissimi globosi, labello ipso sepala vix excedente, anthera obl. connectivo obtuso, thecas paululo excedens, rostell. anguste cucullatum, ½ antherae altitudine atting. canalib. anth. brevib. ascendentib. ovar. glabro.

Sumatra. (Burk). Ähnelt etwas Hab. laxiflora Blh. ist aber dem Stigma nach eine Platanthera.

Corysanthes mirabilis Schl. – Erecta pusilla tenuis simplex c. 15 cm alta. Caule ima basi paucivaginato, 1-foliato, glabro, tenui, Fol. sessili cordato amplexicauli ovato, acuto-acumin. leviter undulato, glabro, exsiccatione tenui, c. 3 cm lgo, basi 2 cm lto, bractea ovato lanc. ovario sessili fere aequilongo. Fl. singulo erecto, inter majores generis. Sep. interm. lanc. ligulato acuto, glabro concavo 2 cm lgo. medio c 5 mm lto, lateralib. ascendentib. filiformib. sep. intern. excedentib. glabr. Pet. sep. lat. similib. & aequilong. glabr. erectis. Lab. erecto concavo late oblongo, apice obscure 3lobato, lob. lateralib. erect. obtusissim. intermedio deflexo, obtusiusculo acuminato v. apiculato, calcarib. 2 parvul. conicis in basi labelli, lab. toto c. 1.3 cm lgo. Col. brevi teretiuscula 1.3 cm lga, anthera rotundata.

Neue Hebriden. Summit of peak between Anumy & Ithug. Aneiteum c. 2300 ft. (Rev. Morrison) – Fl. Junio.

? Von andern Arten durch ihren Habitus verschieden. Höchstens mit C. rivularis Hk. f. zu vergleichen

Vrydagzynia Whitmei Schl. – Erecta, humilis, simplex, radicib. crassiusculis, villos. elongat. Caule e basi decumbente radicante stricto, basi vaginato, usq. infra apicem laxe foliato. Fol. petiolat. obliq. lanc. acumin. glabr. textura tenuib. 3½–4 cm lg. infra medium 1–1½ cm lt. petiolo basi dilatato, amplectente 1–1½ cm lgo. Spica densa ∞ flora cylindracea c. 2½ cm lga 7 mm diam. bract. lanc. acumin.

glabr. florib. aequilong. v. paulo ~~brevioribus~~. Florib. inter minores illis Vr. albostriatae Schl. similib. Sep. interm. oblongo-ligulato obtuso, apice more generis incrassato concavo c. 2½ mm lgo, extus dimidio inferiore sparsim hispidulo, lateralib. intermedio simulib. margine anteriore basi ampliat. obliqu. Pet. oblique oblongo-ligulat. obtus. glabr. sepalis paulo brevioribus glabr. Lab. ovato-oblongo obtuso, apice versus marginib. incurv. glabro, nervo medio apicem versus incrassato, petalis vix aequilongo, calcari conico obtuso glabro 2½ mm lgo, appendicib. intus alte liberis, medium bene excedentib. Col. brevi, brachiis apice incurv. rostello triangulo, apice breviter exciso, ovario fusiformi cylindr. hispidulo 4 mm lgo

Samoa Isl. (Rev. Whitmee)

Weicht von Vr. albo-striata ab durch kleinere Blt. eine abweichende Lippe & Columna.

Zeuxine Chalmersii Schl. Typus in herb. Melbourne & Schl. 297

Pusilla c. 6 cm alta, simplex. Caule e basi decumbente erecto, terete, glabro medio paucifoliato, basi vaginato, paucifloro. Fol. patulis oblique ovat. acuminat. glabr. 1,2-1,5 cm lg. infra medium 6-8 mm lt. petiolo basi dilatata vaginante, brevi. Infloresc. pauciflora, bract. lanc. acum. mox emarcescentib. ovarium excedentib. florib. erect. ut videtur albid. Sep. intermedio e basi ovata obtusiuscule acumin. extus puberulo praesertim basi 5 mm lgo, lateralibus oblique oblong. breviter acuminat. puberul. intermedio fere aequilong. Pet. e basi ovata obtusiuscule acumin. glabr. obliqu. margine anteriore in dimidio inferiore dilatat. sep. intermedio aequilong. margine posteriore adhaerentib. Lab. e basi concava unguiculato-angustato antice trilobato, lob. lateralib. patentib. oblique oblong. obtus. intermedio breviter unguiculato transverso brevissimo acuminato 2 mm lato papilloso, toto lab. 5 mm lgo, supra basin intus squamulis 2 rotundatis ornato. Col. brevi bibrachiata, brach. oblong. irregulariter crenulat. rostello gracillimo erecto, alte 2fido, anthera longius rostrata basi cordata, polliniis clavat. in dimidio inferiore in stipite lineare coalitis, glandula oblanc. antice acuta, ovario puberulo cylindrico 6 mm lgo.

S.E. New Guinea (Rev. Chalmers) – Erinnert habituell an Myrmechis.

Zeuxine samoensis Schl. (Typ. in herb. Melbourne & Schl.)

Gracilis e basi decumbente erecta, habitu Z. affinis Bl. c. 20 cm alta, caule radicante erecto, ima basi squamato, infra medium paucifoliato, superne vagin. dissitis sensim in bracteas abeuntib. obsesso, inflorescentiā versus puberulo. Fol. petiolat. oblique ovat. v. ovato-lanc. acut. v. acumin, exsiccatione tenuib. 3-3½ cm lg. infra medium c. 1½ cm lt. petiolo e basi dilatato vaginante glabro c 1,3 cm lgo, spica sublaxe pluriflora, bract. lanc. v. ovat. acumin. vulgo ovario bene brevioribus. florib. in genere inter minores, sep. intermed ovato-lanceol. obtusiusc. concavo, extus setis reflex. piloso, 3 mm lgo, lateralib. intermedio similib. tamen paulo obliquis. Pet. oblique obl. ligulat. obtus. glabr. margine posteriore sep. intermed. adhaerentib. fere aequilong. Lab. e basi ovata concava in unguē lineare contracto, marginib. incurv. antice bilobo, lob. divaricat. obl. obtus. glaberrimo, supra basin squamulis 2 donato, sepalis paulo longiore, lob. apicalib 1½ mm lgis. Col. in facie bilamellata, rostello alte 2fido, anthera elongato-rostrata, ovario subfusiformi cylindr. pil. reflex. obsesso 5 mm lgo.

Samoa-Archipel. Upolu. — E Betche n. 48.

Mit Z amboinensis (Haplochilus amboin. J.J. Sm.) verwandt (& wahrscheinlich identisch — K.) & Hapl. virescens J.J. Sm., soll sich durch die schlankere Säule mit weniger hohen Lamellen unterscheiden ? ?

298 Goodyera Matsumurana Schl. (Typ. herb. Schl.) Erecta v. ascendens, 10-12 cm alta, radicib. villos. Caule brevi glabro, dimidio inferiore bene foliato, supra folia usq. ad basin inflorescentiae paucivaginato. Fol. petiolat. oblique obl.-ellipticis, acut. glabris superne roseo-pict. 3-5 cm lg. infra medium v. medio 1,6 ad 2,3 cm lt. petiolo basi dilatato cucullato caule amplectente, 1,2 ad 1,7 cm lgo glabro, spica subcylindrica dense ∞ flora, bract. lanc. acumin. glabr. florib. fere aequilong, florib. suberect. in genere

inter minores. Sep. intermedio obl. obt. glabro, concavo, vix 2 mm lgo. lateralib. oblique obl.-ligulatis, obt. glabr. sep. interm. vix superantib. Pet. oblique oblanceol. spathulat. obtusiusc. glabr., margine posteriore sep. intermedio aequilongo adhaerentib. Lab. ovato obtuso basi saccato concavo, exappendiculato glabro, marginib. laminae paulum incurvis, sep. lateral. paulo breviore. Col. pro genere breviore medio ampliata, rostello emarginato, anthera obcordata obtusiuscula, pollinar. oblique clavat. glandula suborbiculari ampla, ovario fusiformi glabro 9 mm lgo. – Insel Oshima (Liu Kiu) leg. Utsiyama. – Fl. Decembri.

<u>Goodyera triandra</u> Schl. Typ. herb. Schl.) Terrestris ad 30 cm alta. radicib. crassiuscul. flex. elongat. villos. Caule e basi decumbente, radicante, stricto, basi medioque glabro, racemum versus et rhachi puberulo, basi foliato, supra vagin. amplectentib. acuminat. sensim in bracteas decrescentib. laxe obsesso. Fol. graciliter petiolat. oblique ellipti. v. lanceol.-elliptic. acuminat. glabr. textura tenuib. 8-11 cm lg. medio fere 3-4½ cm lt. petiolo basi valde dilatata cucullato-amplectente 4-6 cm lgo. racemo cylindr. subdense multifloro, c. 9 cm lgo. c. 2 cm diam. florib. ill. <u>G. Waitziana</u> Bl. fere aequimagn. Sep. obl. obtusiusc. concav. puberul. 6 mm lg. lateralib. patentib. Pet. sep. interm. aequilongo postice inter adhaerentib., e basi lineari-unguiculata oblique rhombeo-obl. obtus. glabr. Lab. concavo rotundato, antice obtuse acuminato, contracto, marginib. incurvis inter in dimidio inferiore medio excepto appendicib. cylindr. donato, ceterum nudo. c. 4 mm lgo. Col. gracili cylindr. latere utroq. antherae filamento libero thecis inaequimagnis donata, anthera normali lanceolata acuminata, pollin. gracilib. dimidio inferiore cohaerentib. glandula obl. ovario fusiformi puberulo c. 7 mm lgo. – Fl. Augusto. <u>Neue Hebriden</u>. Mt Mc Donald. (Rev. Morrison)

Fraglich, ob sie stets 3 Antheren hat. An Schl's Ex. schien es d. Fall zu sein.

299 Aphyllorchis borneensis Schl. (Typ. herb. Schl.) Elata

Elata, saprophytica, macra c. 90 cm alta, aphylla. Caule stricto, gracili, terete, glabro, vagin. dissit. oblongo, obtuse acuminat. glabr. arctius amplectentib. obsesso, racemo laxe plurifloro, subsecundo, bract. pat. v. deflex. obl.-ligulat. obtusiuscul. ovario gracili brevioribus. Florib. erect. v. demum patul. in genere inter majores. Sep. ligulat. apiculato-carinat. glabr. c. 1 cm lg. basin versus angustat. lateralib. paulum obliqu. Pet. subfalcato-ligulat. obtusiuscul. acuminat. glabr. sep. fere aequilater. sed paulo breviorib. Lab. obl.-elliptico obtusiusculo, basin versus angustato, supra basin utrinq. lobulo parvulo lanceol. divergente donato, basi obscure callo trilobo ornato c. 8 mm lgo, fere 3 1/2 mm lto. Col. gracili 7 mm lga. semiterete, apice paulum ampliata, anthera rotundata generis ovar. pedicellato cylindr. glabro, c. pedicello c. 1.3 cm lgo, sed mox elongato. — Borneo. Im Humus d. Wälder am Long Sele, im Staate Koetei. (R. Schlechter n. 13520) Fl. Augusto. Selten nur 1 x gefunden. Blt hellgelb mit violettblauen Flecken. Verwandt mit Pogonia striata Ridl. & Yoania aberrans Finet, welche Schl. beide in Aphyllorchis umtaufte.

Didymoplexis himalaica Schl. (Typ. herb. Barbey-Boissier)

Saprophytica erecta, pusilla c. 15 cm alta. Caule squamis perpaucis dissit. parvul. obsesso, apice plurifloro, racemo abbreviato, bract. ovat. obtusiuscul. mox emarcid. ovario pedicellato multoties breviorib. florib. illis D. pallentis Griff similib. fere aequimagn. Sep. pet. q. obl. obt. usq. supra medium connat. 6-7 mm lg. glabr. petalis sepalis vix brevioribus. Lab. late cuneato, antice truncato, minute serrulato, petalis vix aequilongo. lineis 3 carnucularum e basi usq. infra apicem ornato, glabro. Col. semiteres labello subaequilonga, anthera cucullata obtusa. ovario clavato, glabro, mox elongato.

Himalaya. Teesta valley. Eingeborne Sammler. Bl. ~~August~~ Juni.
Mit D. minor J. J. Sm. sehr nahe verwandt, durch d. breitere Lab. u. d. von ¼ unten nicht gr. hängenden 3 Reihen von Warzen in d. Mitte.

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**Didymoplexis latilabris** Schl. (Typ. herb. Schl.) Saprophytica erecta, 8–12 cm alta, tubere fusiformi-oblongoideo. Caule stricto, terete glabro, squamis paucis distantibus ovat. obtus. donato, aphyllo, plurifloro, racemo sublaxo, demum paulum elongato, bract. ovat. obtus., ovario pedicellato conspicue brevioribus, floribus illis D. pallentis Griff similib. aequimagn. Sep. pet. q. usq. supra medium connat. c. 6 mm lg. glabr. apicib. liber. obtus. semioblong. Lab. transverso, latissime cuneato, antice truncato, medio pulvinari carnosulam irregulariter transversam e basi apicem usq. ornato, petalis breviore 5 mm lto. Col. semiterete glabra, apice ampliata, anthera cucullata obtusa, ovario pedicellato clavato glabro, mox elongato. – Borneo. Im Humus d. Wälder am Long Dett (Schlechter n. 13532). Fl. Augusto.

In d. Breite der Lab. übertrifft diese Art noch D. pallens Griff, sie zeichnet sich ausserdem durch d. breite Zone unregelmässiger quergestreckter Wärzchen in d. Mitte der Lab. aus.

**Tropidia Barbeyana** Schl. – (Typ. herb. Barbey-Boissier) Erecta, glabra frutescens, ramosa, ram. ramul. q. erect. teretiusc. glabr. Fol. ad apices ramulorum geminat. v. ternat. obl.-elliptic. acumin. basi in petiolum brevem angustat. nervos. 17–22 cm lg. medio fere 4½–6½ cm lt. Inflorescent. terminal. vulgo simplicib. interdum ramos. foliis 3–5plo brevioribus. pedunculo cataphyll. amplectentib. vestito racemo erecto v. demum nutante dense multifloro. bract. lanc. acumin. ovarium vulgo excedentib. florib. in genere inter mediocres. Sep. ovato-lanc. acumin. glabr. vix 5 mm lg. lateralib. intermedio latioribus obliqu. Pet. oblique ovato-elliptic. breviter acuminat. glabr. sepalis subaequilong. Lab. circuitu ovato, e basi concava rotundato, infra apicem constricto, apice in lobulum ovatum

obtusũ producto, petalis paulo breviore, nervis 3 median. incrassat. Col. brevi, rostello abbreviato, anthera ovato-lanceolata subacuminata, basi cordata, ovario subcylindr. subsessili, 5 m̃ lgo. – Fl. Junio.

Indien: Bei Rungbee c. 1500 m ü. M. – eingeborne Sammler.

Erinnert habituell an Tr. angulata Bl. aber durch d. Blt verschieden (?? K.)

301 Nephelaphyllum borneense Schl. (Typ. herb. Schl.) Terrestre humile c. 8 cm alt. Caule decumbente radicante bene foliato, radic. filiform. Fol. erect. petiolat. ovat. acumin. basi subcordato-truncat. glabr. tenuib. 4 ad 4½ cm lg. basi v. supra bas. 2½–3,3 cm lt. petiolo basi vaginante c. 1 cm lg., scapo foliis vix aequilongo v. breviore, apice pluriflora, vagin. pauc. arcte amplectentib. obsesso, bract. lanc. acumin. ~~ovarĩ~~ ovariũ aequantib. florib. illis N. pulchri Bl. fere aequimagn. erect. invers. Sep. deflex. anguste lanc.-ligulat. acumin. 9 m̃ lg. Pet. deflex. sepalis similib. aequilong. sed basin versus paulo angustat. obtusiusc. paulũ obliqu. Lab. e basi cuneata obl. concavo, breviter apiculato, antice infra apicẽ lineis 3 caruncularũ brevib. ornato, ceterũ nudo c. 1 cm lgo, supra mediũ 4 m̃ lt. calcari oblongoideo obtuso c. 3 m̃ lg. Col. gracili, clinandrio paucidentato, apicẽ versus ampliata, glabra, ovario breviter pedicellato, clavato, c. 1,2 cm lgo puncticulato. – Fl. Augusto.

Borneo: Im Humus d. Urwälder am Long Sele, im Staate Kutei. (Schlechter n. 13526). – Von N. pulchrũ durch das bedeutend schmalere Lab. unterschieden. Bl. grünlich mit metallbraunem Glanz.

Nephelaphyllum gracile Schl. (Typ. herb. Schl.) Gracile decumbens ad 15 cm alt. glabrũ, radicib. flexuos. villos. Fol. lax. erect. petiolat. ovat. acut. v. subacuminat. glabr. tenuib. 2–2½ cm lg. supra basin 1,3–1,5 cm lt. petiolo basi vaginante dilatato, c. 1 cm lg.; scapo erecto

gracili folia multoties superante, terete, glabro, vagin. pauc. dissit. laxe amplectentib. obsesso, apice c. 4-floro, florib. ill. N. cordifolii Ldl fere aequimagnis, Sep. reflex. angusto lanc.-ligulat. acuminat. 8 mm lg. lateralib. paulu obliqu. Pet. e basi paulu angustata oblique ligulat. apiculat. reflex. sepalis subaequilong. Lab. cuneato, antice 3lobo, lob. lateralib. parvul. oblique obl. obtus. lobo intermedio transverso amplo, apice breviter exciso, dimidio inferiore labelli puberulo, incrassatione puberula e basi mediu usq. lobi intermedii decurrente, apice tubercul. 3 glabr. ornata. labelli lamina 8 mm lga, lobo interm. c. 2 mm lgo. 4 mm lt. calcari cylindraceo subrecto, apice vix ampliato, breviter exciso, 3 mm lgo. Col. gracili semiterete glabra, clinandrio serrulato, ovario pedicellato clavato glabro 8 mm longo. – Fl. Augusto.

Von allen bekannten Arten schon habituell durch die kleinen Bl. ausgezeichnet

Platyclinis dolichobrachia Schl. – Typ. in herb. Schl. – Epiphytica ~~erecta caespitosa~~ 10–13 cm alta. Rhizoma valde abbreviatu, dense pseudobulbis obsesso, radicib. filiformib. elongat. flexuos. glabr. Pseudobulb. erect. cylindraceo – ~~fili~~formib. [unif.] apice 1-foliat. 1–1,7 cm lg. infra mediu 3–4 mm diam. Fol. erecto lineari obtuso. basi in petiolu angustato, coriaceo, c. petiolo 5, 8 cm lgo., medio fere 2½–3½ mm lt. scapo terminali, gracili, arcuato, evaginato, ~~arcuo~~ distichoso pro genere laxo ∞floro, folia vulgo paulu excedente, florib. in genere inter minores invers. breviter pedicellat. Sep. interm. lanc. ligulato acutiusc. concavulo, 3 mm lgo, lateralib. similib. aequilong. paul. obliqu. Pet. ~~paulu~~ oblique [lineari] ligulat. obtusiusc. sep. subaequilong. Lab. e basi cuneata 3lobo medio longitudinaliter lamell 2. dimidio inferiore bene alt. e basi usq. infra apicu decurrentib. sep. subaequilongo, lob. lateral. lanc.-falcat. subacut., intermedio multo majore transverso breviter acuminato 1½ mm lgo 3 mm lto. Col. elata, semiterete glabra brachiis 2 ad basin peraampl. ~~illis~~ columna paulo brevioribus lineari obtusiusc. clinandrio amplo ovato-lanceol. obtusiusculo, anthera cucullata,

galeata, dorso gibbo donata, ovario breviter pedicellato-clavato, bracteas paulo excedente. – Fl. Augusto.

Borneo. Auf Bäumen in d. Wäldern am Long Dett, im Staate Koetei (Schlechter n. 13557). Durch d. Lab. u. d. langen Arme der Col. ausgezeichnet.

Platyclinis formosana Schl. (Typ. herb. Schl.) Epiphyticā erectā, 20–25 cm altā, rhizomate valde abbreviato dense pseudobulb. ovoideo-cylindrac. teretib. apice 1-foliat. 2½–4 cm lg. infra mediū 7–12 mm diam. Fol. erecto, ligulato-obtusiusc. acumin. coriaceo, petiolato 10–14 cm lgo, medio fere 1,5–2,2 cm lt. petiolo teretiusculo, superne sulcato c. 4 cm lgo. scap. terminalib. e pseudobulb. nondū evolut. nat. gracilib. evaginat. racemo distiche subdense ∞floro, gracilder arcuato bract. ovat. acut. ovario subaequilong. glabr. florib. illi. Pl. latifoliae Hemsl. fere aequimagn. invers. Sep. lanc.-ligulat. obtusiuscule acutat. glabr. 5 mm lg. lateralib. paulū obliqu. Pet. oblique ligulat. subacut. glabr. sep. subaequilong. Lab. circuitu subpandurata triloba, medio longitudinaliter usq. supra mediū bicarinato, glabro, pet. fere aequilongo, lob. lateral. minut. falcato-dentiformib. intermedio multotier majore elliptico obtusiuscule acuminato. Col. brevi, brachiis lateralib. linearib. falcato patulis clinandrio oblongo obtuso, brachia bene excedente, anthera cucullata acutata, dorso gibbo donata, ovario breviter pedicellato glabro c. 5 mm lgo. – Fl. Novembri.

Formosa. Insel Kotosho. (T. Miyake) – Durch die Entdeckg dieser Art wird d. Verbreitgsgebiet d. Gattg bedeutend nach Norden erweitert.

Platyclinis microchila Schl. (Typ. herb. Schl.) Epiphytica caespitosa, pusilla, rhizomate valde abbreviato, dense pseudobulb. obtecto, radicib. filiform. elongat. Pseudobulbs ovoideo-conicis, vulgo 1-foliat. (adsunt etiā 2fol.) 1,2–1,5 cm alt. supra basin 4–5 mm diam. Fol. erecto ligulato, inaequaliter bilobo, coriaceo, basi in petiolū bre- ve

attenuato c. petiolo 4-8.5 cm lgo. medio fere 5-8 mm lt., scapo apicali gracillimo, incurvulo, glabro, spica disticha, dense coflora, elongata folium vulgo excedente, bract. obl.-obovat. subacut. cucullato-concav. florib. paulo breviorib., florib. inter minimos generis. Sep. anguste lanc.-ligulat. acuminat. glabr. 2 1/2 mm lg. Pet. obliquis, anguste lanc. acumin. sep. valde similib. sed paulo breviorib. Lab. minuto, 3lobo, lob. later. obl.-ligulat. obtusiusc. falcat. intermedium excedentib. intermedio abbreviato obscure trilobato v. potius medio breviter acuminato, labello toto vix 1 mm lgo. (i.e. inter apices loborum lateralium 1.5 mm lto) Col. ebrachiata semiterete, rostello ovato-triangulo amplo, clinandrio paulo minore, ovario subclavato glabro, vix 1/2 mm lgo.

Britisch Borneo. Cult. in einem Garten in Sandakan, soll von Manilla importiert sein (R. Schlechter ohne n.)

Mit d. Struktur einer Blüte d. Acoridium-Formen d. Gattung vereinigt diese Art den typischen Habitus einer echten Platyclinis.

Dendrochilum micranthum Schl. (Typ. herb. Schl.) Epiphyt 309

gracile dependens ramosum. Rhizomate elongato, terete glabro, ad 50 cm longo, radicante, vagin. arcte amplectentib. vestito, 3 mm diam. Pseudobulb. dissitis, cylindrac. basin versus paulum ampliat. 1-foliat. 2-2,8 cm lgis, supra basin 3 mm diam. Folio elliptico-ligulato basi in petiolum breve angustato, 7.5-11 cm lgo, medio fere 2.3-3.5 cm lto. petiolo 6-10 mm lgo. Racemis infra pseudobulbos natis, arcuat. in basi incrassata vagin. tectis sublaxe coflor. quam pseudobulbi fere 2plo longiorib., bract. ovat. breviter acuminat. glabr. ovario paulo breviorib. Sep. obl.-ligulat. subacuti v. brevissime apiculat. 3 mm lgis glabr. lateralib. paulo obliqu. Pet. sepalis similib. paulo angustiorib. breviter acuminat. vix aequilong. Lab. obl.-subpandurato obtusiusculo curvato, medio longitudinaliter callis 2 e basi usq. infra apicem decurrentib. ornato, petalis paulo longiore. Col breviuscula, recta, brachiis falcato-linearib. erectis, clinandrio amplo leviter et obscure bilobo paulo breviorib. Anthera cucullata, dorso gibbo obtuso donato, ovario pedicellato clavato glabro, 1 1/2 mm lgo.

Borneo. Auf Bäumen bei den grossen Kalkhöhlen am Long Gombeng im Staate Koetei (Schlechter n. 13561). – Bl. im August.
Mit D. altum Ridl. & aurantiacum Bl. verwandt. von beiden durch d. kleinen Blüten leicht zu unterscheiden.

Oberonia Betchei Schl. (Typ. herb. Schl. & Melbourne) Epiphytica acaulis, radicib. filiform. Fol. 4–5 equitantib. subfalcato-lanc. v. ligulat. acut. glabr. coriac. ad 20 cm lg. supra basin ad 1,4 cm lt. scapo simplice, spica elongata dense ∞ flora, foliis breviore, rhachi puberula, bract. ovato-obl. acumin. apice verruc dentat. ovariū nunc aequantib. nunc superantib. florib. subverticillat. inter minores generis. Sep. ovato-obl. subacut. glabr. vix 1 mm lg. deflex. Pet. ligulat. obt. obliqu. sepalis subaequilong. angustiorib. tamen, Lab. erecto obl.-subquadrato, apice obtusissimo, carnosulo, medio longitudinaliter latius foveolato, quā sep. sublongiore, integro. Col. brevi crassiuscula, anthera rotundata antice apiculata, ovario clavato glabro quā sep. paulo longiore.
Samoa-Archipel. – (E. Betche n. 38)
Gut (?) gekennzeichnet durch d. behaarte Rhachis & die fast 4-eckige längliche Lippe, zunächst verwandt ist vielleicht O. dolichophylla Schltr. – N. Guinea.

304 Oberonia indragiriensis Schl. (Typ. herb. Schl.) Acaulis.
Acaulis c. 15 cm alta pro genere valida, radicib. elongat. Fol. anguste falcato-lanc. acut. equitantib., carnosul. 8–13 cm lg. medio 1–1,3 cm lt., spic. elongat. dense ∞ flor. cylindr. folia fere dimidio excedentib. florib. parvul. flavido-virescentib. vix 1 mm diam., bract. ovat. obtus. apiculat. margine interdū denticulat. glabr. Sep. late obl. obt. integr. lateralib. paulū obliqu. Pet. oblique ovat. obtus. margine sub-microscopice serrulat. sepal. aequilong. Lab. circuitu subreniformi obtuso, medio basin verruc foveolato, laterib. profunde lacerato, apice integro, sepala vix excedente. Col. brevis, crassiuscula

anthera cucullato-rotundata, obtusa, ovario subsessili obl-cylindrico, vix 5 mm longo, glabro. — Mai.

Sumatra. am Danau-Rotta im Distr. Indragiri (Schl. n. 13306)
Durch d. Gestalt d. Lippe von sämtl. Arten der Acaules verschieden.

Oberonia labidoglossa Schl. (Typ. herb. Schl.) Caulescens, erecta, v. dependens, 10-17 cm lg. Caule stricto, bene foliato, Fol. distich. equitantib. falcato-lanc.-acut. carnosul. ad 5 cm lg. supra basin 5 mm lt. superiorib. mox abbreviat. racemo elongato pedunculato pro genere laxo ∞floro, folia multo excedente. bract. lanc. acum. ovario pedicellato breviorib. florib. minut. vix 1 mm excedentib. Sep. ovat. obtusiusc. glabr. lateralib. obliquis reflex. Pet. oblongo lanceol. acumin. margine albe lacer. sepalis aequilong. Lab. concavulo oblongo, antice forcipato emarginato, segment. triangul. acut. basi utring. subhastato-auriculato, glaberrimo, quam pet. paulo longiore. Col. brevi, anthera suborbiculari (concava antice vix produeta, obtusa, ovario pedicellato clavato (cucullata) glabro 1 mm lgo. Bl. im Mai.

Sumatra. Sungei Lalah, im Distr. Indragiri (Schl. n. 13276)
Habituell O. dissitifl. Ridl. sehr ähnlich, soll im Bau d. Blt sehr abweichen?

Oberonia laxa Schl. (Typ. herb. Schl.) Epiph. dependens acaulis, 20-25 cm lg. Fol. equitant. lin.-lanc. acut. subfalcat. carnosul. ad 20 cm lg. infra medium 1-1,4 cm lt. racemo elongato, laxo ∞floro, folia paulum excedente, bract. lanc. acuminat. margine sub inconspicue serrulat. quam ovarium pedicellatum paulo breviorib. florib. patentib. aurantiac. 3 mm diam. Sep. ovat. obl. obt. 1 mm lg. integr. lateralib. paulum obliqu. Pet. lin.-ligulat. obtus. integr. sepalis fere aequilg. Lab. inverso 4-fido, circuitu oblongo-quadrato sep. pet. q. dimidio fere longiore, lob. falcato-triangular. acut. anterioribus quam interiorib. paulo longiorib. Col. brevi crassiuscula, anthera rotundata obtusa pollin. oblongoideis, ovario pedicellato clavato 3 mm lgo. — Fl. Octobr.

Banda. Auf Bäumen am Gunong Api. (Schl. n. 13658)
Erinnert im Lab. an O. insculifera Hook. f.

Oberonia melinantha Schl. – (Typ. herb. Schl.) – Acaulis pusilla 3,5–7 cm alta, caespitosa. Fol. lin. falcata, acuta, carnosula, equitantia, ad 5 cm lg. medio 2–3 mm lt. racem. folia paulo excedentia, dense ∞ flora, bract. lanc. triangul. acumin. v. acut. subdenticulat. ovario pedicellato fere aequilg. florib. inter minimos generis 1,5 mm diam. subverticillat. fasciculat. aurantiac. Sep. ovato-~~triangul.~~ obl. obtusiuscul. v. acut. lateralib. subobliquis, integr. Pet. oblique obl. obtus. glabr. sepal. fere aequilg. Lab. sepalis paulo majore 3lobo, basi foveolato, lob. lateralib. rotundat. lobo intermedio lateralib. fere duplo majore cuneato apice bilobo, lobul. rotundat. obtus. Col. brevi crassiuscula anthera subreniformi obtusa, pollin. obl. ovario breviter pedicellato clavato glabro 1/2 mm lgo. – Fl. Julio.

Borneo. Auf Bäumen bei Moeara-Kelindjau im Staate Koetei (Schl. n. 13364)
Wegen der Form der Lippe muss man die Art in d. Nähe von Ob. palmicola F. v. Muell. stellen, von der sie durch d. orangeroten Blt & schmaleren Bl. abweicht.

Oberonia polyschista Schl. (Typ. herb. Schl.) Acaulis c. 13 cm alta. Fol. subfalcat. lin. lanc. acuminat. equitantib. carnosul. 8–10 cm lg. infra medium ~~7~~–10 mm lt. inflorescentia breviter pedunculata spicata, dense ∞ flora elongata, folia excedente 5 mm diam. bract. lanc. acut. margine irregularib. ovario aequilong. florib. inverso. vix 1 mm diam. Sep. ovat.-acut. glabr., lateralib. suboblong. ~~acut.~~ obliqu. Pet. circui-

tu

oblique elliptico-ligulat. obtus. altius lacerat. sepal. fere aequilg. Lab. e basi rotundata margine altius lacerata antice in lobum, cuneatum, truncatum producto, basi foveolato, glaberrimo sep. pet. q. longitudine paulo excedente. Col. brevi, anthera suborbiculari, subcucullata, glabra, pollin. oblongoideis ovario subsessili clavato, glabro 1/2 mm lgo. Fl. Maio.
Sumatra. Am Sungei Lalah, im Distr. Indragiri. (R. Schl. n. 13264)

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Oberonia potamophila Schl. (Typ. herb. Schl.) Acaulis caespitosa 5-7 cm alta. Fol. distich. equitantib. subfalcato-linear. acut. carnosul. 4-5 cm lg. 2 ad 3 mm lt. racem. terminal. dense ∞ flor. elongat. folia paulo excedentib. florib. inter minutissimos generis, diam. 1/2 mm vix excedentib. bract. lanc. acut. margine irregularib. ovario subaequilg. Sep. ovat. obtus. glabr. lateralib. paulum obliqu. Pet. ligulat. obtus. glabr. integr. quam sep. subduplo angustiorib. obliqu. Lab. 3lobo, lob. later. oblique ovat. obtusiusc. intermedio multo majore subcuneato-quadrato, antice obtusato, omnino glabro, basi foveolato, sep. pet. q. paulo excedente. Col. brevi, anthera rotundata concava, antice breviter subacuminata, pollin. oblongoideis, ovar. brev. pedicellato clavato glabro vix 1/2 mm lgo. - Fl. Maio.
Sumatra. Auf Bäumen am Sungei Ayer-Putke im Distr. Indragiri (R. Schl. n. 13255). - Sehr schmale Bl. u. ein einfach 3teilig. Lab.! Wuchs in Masse auf 1 einzig. Baum, während an sämtl. Bäumen d. Nachbarschaft auch nicht d. geringste Spur davon z. sehen war.

Oberonia sumatrana Schl. - (Typ. herb. Schl.) Acaulis caespitosa 6-10 cm alta, Fol. falcato-linear. acut. v. acuminat. equitantib. carnosul. 5-8 cm lg. medio fere 3-4 mm lt. racemo dense ∞ floro, elongato, vulgo folia paulo excedente cylindrac. 3 mm diam., bract. lanc. acuminat. subdentat. ovario breviter pedicellato fere aequilg. florib. minut. subverticillat. virescentib. vix 1 mm diam. Sep. late ovato-obl. obtusiuscul. lateralib. paulum obliqu. Pet. ovovatum obl. obt.

praesertim medio lacerato-dentat. sep. fere aequilgis. Lab. e basi rotundata margine lacerata antice in lobulum obl. ? fidum producto, segment. triangulo-lanc. acut. dente parvulo interjecto, lab. toto glabro, basi foveolato sep. paulo excedente. Col. brevi crassiuscula, anthera cucullata, obtusa, glabra. pollin. oblong. ovario breviter pedicell. clavato glabro 1 cm non attingente.
Sumatra. Auf Bäumen am Danau Kotta. Distr. Indragiri (Schl. n. 13304) Bl. im Mai. — Mit d. ob. beschrieb. O. polychista Schl. verwandt, unterschieden durch schmalere Bl. & d. Vorderlappen d. Lab.

307 Liparis bicornuta Schl. Typ. herb. Schl. Epiphyt. erecta caespitosa, 8–23 cm lg. rhizomate abbreviato, dense pseudobulb. obsesso, pseudobulb. ovat. compress. 2foliat. 1–1,8 cm lg. medio fere ½–1 cm lt. Fol. lanceol. elliptic. acumin. basi paulo angustat. tenuioribus textura, 3–8 cm lg. medio 7–1,7 cm lt. Scap. terminalib. erect. fol. 2plo v. plus 2plo excedentib. paulo compress. vagin. dissit. lanc. acuminat. obsesso, 10–30-floro, sublaxo, rhachi haud flexuosa, bract. lanc. acumin. ovario pedicellat. 4 cm lgo brevioribus. Flores ill. L. decurrentis fere aequimagn. invers. Sep. obl. ligulat. obtusiusc. glabr. 4 cm lg. lateralib. paulum obliquedat. subfalcato-linearib. acut. basi subdilatat. sepal. fere aequilg. Lab. subrhombeo oblongo dimidio anteriore subattenuato obtusato, cornub. falcato divergentib in medio labelli c. 4 cm lgi. Col. paulum arcuata, teretiuscula, basi antice paulo ampliata, apice vix dilatata, teretiuscula basi antice paulum ampliata, apice vix dilatata, anthera suborbiculari obtusa. — Fl. Septembri.
Java. Epiph. in Wäldern oberhalb Tjibodas (Schl. n. 13596)
Soll allen Sammlern bis auf Herrn Schl. entgangen sein, weil sie immer für d. verwandte L. decurrens Lindl. gehalten wurde, die aber ein ganz anderes Labell hat. (Wenn möglich, daraufhin nachuntersuchen!)
Kr

<u>Liparis dolichostachys</u> Schl. – (Typ herb. Schl.). Epiph. erecta gracilis ad 50 cm alta. Rhizomate decumbente elongato radicante, vagin. obtecto, laxe pseudobulb. obsesso. Pseudob. e basi ampliata sensim attenuat. 1-foliat. 5-6 cm lg. supra basin 9-10 mm ~~lt.~~ diam. apice 4 mm diam. Fol. erecto lineari-lanc. acumin. basin versus angustato, subcoriaceo 15-20 cm lgo medio fere 1.3-2 cm lto, racemo ima basi tantū vaginul. obsesso, cetera subdense ∞ floro, elongato, ad 38 cm lgo, 8 mm diam. bract. lanc. acumin. ovario pedicellato elevato 3 mm lgo brevioribus. Sep. reflex. obl. ligulat. obt. c. 2 mm lgis, lateralib. obliqu. Pet. linear. subfalcat. obtusiusc. sepalis fere aequilgis Lab. curvato 3lobo, lob. lateral. oblique obl. obt. intermedio majore suborbiculari breviter & obtuse acuminato, laterales bene excedente, callo duplice obl. in basi labelli, callo tertio ad basin lobi intermedii toto labello vix 2 mm excedente, glabro. Col. paulū arcuata basi apiceque vix ampliata, anthera rotundata, antice apiculata,

<u>Borneo</u>. Epiph. in Sümpfen am Long Wahau im Staate Koetei. (Schl. n. 13540) blüht im August.

Erinnert habituell an L. flaccida Rchb. f. aber durch d. 1blättrigen Pseudobulben & d. 3lappige Lab. unterschieden.

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<u>Liparis Lauterbachii</u> Schl. – (Typ. herb. Lauterbach & Schl.)

Epiphyt. erecta 15-20 cm alta. rhizomate abbreviato dense pseudobulb. obsesso, 1-foliat. compress. primū vagin. ampl. obtect. 2-2,5 cm lg. supra basin 8-10 mm lt. Folio ~~erecto~~ ligulato acuto, basin versus paulū angustato, coriaceo 12-16 cm lg. medio fere 1,5-2,2 cm lt. scapo erecto evaginato paulū compresso, racemo secundo, laxius ~~pluri~~ ∞ floro, nunc folia excedente nunc aequilongo, bract. lanc. acuminat. ovario pedicellato clavato 7 mm lgo paulo brevioribus. Floribus in genere vix intermedioscr. Sep. reflex. obl.-ligulat. acut. v. subacut. 6 mm lg. lateralib. paulū obliqu. Pet. deflex. linear. obt. qu. sep. paulo breviorib. Lab. e basi cuneata erecta, in lobū obovatū deflexū apiculatū

antice minute serrulatū dilatato, basi callo parvulo rotundato aucto, incrassatione hippocrepiformi e basi margines versus usq. ad mediū labelli decurrente, toto labello 5 mm lgo, Col. arcuata semiteretiuscula basi paulū ampliata, apice anguste bialata, anthera rotundata, obtusiuscula. – Fl. Februario.
Java. Auf Bäumen b. Treter im Ardjoeno-Gebirge in 900 m ü. M. (Lauterbach n. 4197)
Aus d. Verwandtschaft von L. crenulata Lindl. durch d. kleinen Blüten u. d. Lab. ausgezeichnet.

Liparis Uchiyamae Schl. (Typ. herb. Schl.). Epiphyt. erecta, caespitosa c. 15 cm alta. rhizomate abbreviato, dense pseudobulbb. obsesso, pseudobulb. parvul. ovoideis, 1-foliat. c. 1 cm lg. medio fere 5–6 mm diam. Folio erecto, lanc.-ligulato acuminato, basin versus angustato, coriaceo 10–15 cm lg. medio fere 1.4–2.2 cm lt. scapo terminali compresso, evaginato, racemo laxe 6–10-floro, subsecundo, bract. lanceol. acuminat. ovario pedicellato 8 mm c. pedicello lgo paulo brevioribus. florib. in genere inter mediocres Sep. e basi dilatata lanc. acut. 7 mm lg. lateralib. patent. obliqu. Pet. reflex. linear. obtus. glabr. sepalis fere aequilong. Lab. carnosulo latius obovato, antice rotundato paucidentato-lobulato, curvato, callo bilobo in basi glaberrimo 6 mm lgo, Col. arcuata semiteretiuscula, apice alis sagittato-auriculat. donata, glabra. anthera rotundata obtusa. Fl. Decembri.
Liu-kiu Archipel. Insel Oshima. (T. Uchiyama)
Soll nach Sch. mit L. plicata Fr. et Sav. verwandt sein (ist vermutlich dieselbe)

Podochilus oxyphyllum Schl. – (Typ. herb. Schl.) Epiphyt. ramosū gracile, ad 13 cm altū, ram. gracilib. dense foliat. teretib. glabr. vaginis foliorū persistentib. dense obtect. Fol. patentib. oblique lanc.-ligulat. acut. textura tenuiorib. 6–10 mm lg. medio fere 2–3 mm lt. racem.

terminalib. patulis, laxius plurifloris ad 1,3 cm lg. distichis, floribus inter minorer generis, bract. lanc. acuminat. ovario pedicellato clavato c. 2 mm lgo paulo longiorib. floribus pallide roseis. Sep. intermedio ovato-obtusiusculo, c. 2 mm lgo, lateralib. aequilg. breviter acutat. valde obliquis dimidio inferiore antice valde dilatat. tertia parte basilari in sacc. subglobosum connatis, Pet. oblique lanc.-ligulatis acut. sepalis fere aequilg. Lab. peltato-affixo ovato elliptico breviter acumin. basi in appendicē linearē bifidā producto, infra apicē gibbo minuto donato, appendice inclusa c. 2 mm lgo, Col. brevi, pede longius producto, rostello erecto triangulo, 2fido, anthera cordato-lanceolata (?) rostrato-acumin. apice excisa,
<u>Borneo</u>. In d. Wäldern am Long Dett, im Staate Koetei (Schl. n. 13558)
Gehört zur Sect. Apista u. steht am besten neben P. serpyllifolium Lindl.

<u>Podochilus pachyrhizum</u> Schl. (Typ. herb. Schl.) 309

Epiphytic. pusillum ramosum, ramis ramulisque filiformib. elongat. bene foliat. decumbentib. radicantib. radicib. crassiuscul. pubescent. Fol. lanc.-ligulat. acuminat. textura tenuiorib. 4-6 mm lg. medio fere 1½-2 mm lt. florib. ad apices ramulorum vulgo singulis illis <u>P. sciuroidis</u> Rchb. f. fere aequimagn. similibusque Sep. intermedio obl. obt. concavo vix 2 mm lg. lateralib. aequilg. obtusiuscul. basi antice bene dilatat. mentum obtusum c. columnae pede productum formantib. basi 1½ mm lt. Pet. oblique obl. obt. sepalis subaequilg. Lab. infra basin columnae pedi apice libero peltato-affixo, obl. obtusiusculo infra basin utrinq. minute angulato, basi ipsa breviter excisa 2½ mm lgo, Col. brevi pede longius producto, rostello erecto, apice minute exciso; anthera ovato-lanc. rostrato-acuminata, breviter cordata, dorso gibbo obl. donata glabra pollin. 4. stipite communi lineari, apicem versus paulo angustata, glandula minuta.

Sumatra. An Baumstämmen am Sungei Lalah. Bez. Indragiri. (R-Schl-n. 13274) Blühte im Mai.
P. appendiculata J. J. Sm. sehr nahe verwandt, aber durch d. Lab. genügend charakterisiert. Die Blüten sind grünlich mit einem roten Fleck auf d. Petalen.

Podochilus sumatranum Schl. (Typ. herb. Schl.) Epiphyt. in ram. truncisq. arborū. decumbens. ramosū. ram. ramulisq. filiformib. elongat. flexuos. radicantib. dense foliat. radicib. filiform. glabr. Fol. linear. acutat. tort. glabr. subcoriacea, 5-8 m̄ lg. vix 1 m̄ lt. Florib. ad apices ramulorū singuli, bract. ovat. acut. ovario sub sessili clavato 7 m̄ lgo fere aequilong. Sep. intermedio ovato obtusiuso. 2 m̄ lgo. lateralib. aequilg. obtusiuscul., basi antice valde dilatata, mentū obtusū formantib. basi 2 m̄ lt. Pet. lin-ligulat. obtus. sepalis fere aequilong. Lab. infra basin in apice liberae columnae pedis peltato-affixo, ligulato, apicē versus paulo dilatato, rotundato apice brevissime medio acuminato, exappendiculato, 2½ m̄ lgo. Col. brevi, rostello erecto tridentato, dentib. lateralib. intermedio multo majorib. anthera cordato-oblonga, antice bicuspidata, pollin. 4 stipitib. 2 excavatis affixis, glandul. 2 distinct. obl. obtusis. — Fl. Aprili. Blt. weiss, mit rosa Anflug.
Sumatra. Auf Bäumen am Sungei Lalah. Bez. Indragiri. (Schl. n. 13289) Sectio Apista. Nächst verwandt mit Pod. tenue Bl. welche eine anders geformter Lab. haben soll.

310 Thelasis borneensis Schl. — (Typ. herb. Schl.) Epiphytica erecta gracilis c. 15 cm alta, rhizomate abbreviato. pseudobulb. obsesso. Pseudobulb. conico-ovoideis ± obliqu. usq. ad 1.5 cm alt. basi ad 1 cm diam. vaginis obtect. 1-foliat. nunc vagina 1 in foliū

evoluta. Fol. lanc. elliptico acuto basi angustato subpetiolato, textura tenuiore, 6–7½ cm lg. medio fere 1½–2 cm lato, scapo basi-lari erecto gracili; folia excedente ~~medio~~ vagin. pauc. dissit. amplectentib. obsesso, terete, glabro- cum Inflorescentia 10–15 cm lgo. racemo subdense ∞ floro, elongato, bract. patul. lanc. acumin. ovario pedicellato clavato 3 mm lgo fere aequilg. Florib. patentib. viridibus. Sep. ovato-elliptic. obtusiuscul. 2½ mm lg. lateralib. paulum oblique. Pet. oblique ligulat. obtus. sepalis subaequimagn. Lab. latius ovato obtuse acuminato, basi subtruncato, apice medio lamella brevi humili ornato 2½ mm lgo. Col. brevi apoda rostello amplo erecto, apice 2fido, anthera ampla oblongoideo-cucullata, acuminato-rostrata.
Borneo. Auf Bäumen am Long Sele, im Staate Koetei. (Schl. n. 13522) Blühte im August.
Mit Ph. bifolia Kron. f. aus Indien verwandt, durch d. Lab. unterschieden.

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Eulophia chrysoglossoides Schl. (Typ. herb. Schl.) Erecta gracilis 30–40 cm alta, radicib. crassiuscul. Pseudobulb. cauliformib. cylindrac. vagin. mox emarcid. obtect. glabr. apice pauci-(3)-foliat. 5–6 cm alt. vix 5 mm diam. Fol. erect. anguste elliptico-ligulat. acumin. plicat. sensim in petiolum nervosum angustat. glabris tenio-rib. c. petiolo 20 cm lg. supra medium 2–2½ cm lt. scapo basilari erecto vaginis paucis dissit. arctius amplectentib. obsesso, folia paulo superante, glabro, racemo laxe 15–20-floro, bract. lanc. acumin mox emarcid. ovarium pedicellatum subaequantib. mox patul. florib. illis E. Dahliana Kränzl. similib. et fere aequimagn. Sep. intermedio lanc. ligulato acumin. c 1,1 cm lgo. lateralib. oblique obl. patulis apiculat. falcat. intermedio paulo brevioril. Pet. oblique lanceol. acumi-

subfalcat. sep. interm. aequilong. Lab. curvato, circuitu subquadrato, 4-lobo, lob. rotundat. obtusiss. c. 8 mm lgo, c. 1 cm lto, basi callo duplici ornato calcari subgloboso brevi, c. 2,5 mm lgo. Col. hyalino-marginata, anthera dorso gibbo donata.

British North Borneo (A. Little)

Von der nächstverwandten E. Oebliana Kränzl aus N. Guinea durch die an Chrysoglossum erinnernde Tracht & der am Grunde mit 2 senkenförmigen Schwielen erinnernde

Dendrobium bandaense Schl. - (Typ. herb. Schl.) Terrestre, erectum 35-50 cm altum, rhizomate abbreviato vaginato, mox denudato, caulib. cylindrac. tereti. demum sulcat. dimidio inferiore vagin. amplectentib. laxe obsess. superiore bene foliato, fol. distich. obl. v. obl-elliptic. apice obtuse & inaequaliter bilob. coriac. 7-11 cm lg. medio fere 2-3.7 cm lt., racem. lateral. subdense 10-20-flor. pedunculo vagin. pauc. distit. obsesso, folia multoties excedentib. bract. ovat. v. ovato-lanc. acut. v. acumin. ovario c. pedicello 2 cm longo multoties breviorib. florib. ill. D. taurini Schl. f. subaequimagn. Sep. lanc. acut. v. subacuminat. c. 2 cm lg. lateralib. obliqu. margine antice dilatat. c. 1 cm lt. mentum conicum calcariforme c. columnae pede producto formantib. Pet. oblique ligulat. in dimidio super. paulum dilatat. obtus. sepalis fere aequilg. Lab. e basi cuneata 3lobo, sep. aequilongo, lob. lateral. oblique obl. obt. intermedio longiore ovato acuto, undulato, lineis 2 incrassatis e basi labelli usq. in basin lobi intermedii decurrentib. apice confluentibus, linea tertia incrassata paulo breviore in nervo medio. Col. brevi, clinandrio dorso apiculato, anthera cucull. antice obtusa, glabra. Fl. Octobri.

Banda Archipel. Zwischen Lava-Geröll auf d. Gunong Api (Schl. 13661)

Blt. gelbgrün m. braunroten Adern. Lab. weiss m. gelben Rändern.

454

Dendrobium bicornutum Schl. (Typ. herb. Schl.)
Epiphyt. dependens, pluricaule, ad 1,20 m lgū. rhizomate valde abbreviato, caulib. simplicib. v. parū ramos. ancipitib. dense folios. vagin. foliorū persistentib. omnino obtecs. Fol. equitantib. lanc. acut. v. acuminat. coriac. dorso vagina excepta 2,5–4 cm lg. infra mediū 5 ad 7 m̄ lt. Florib. in fasciculis subaxillarib. pauciflor. bract. minut. quā ovaria c pedicell. brevioribus. Florib. illis D. rhizophoreti Ridl. similib. & fere aequimagn. Sep. intermed. ovato-obl. obtuso v. 7 m̄ lgo, lateralib. vix aequilg. valde obliqu. basi antice valde dilatat. 5 m̄ lt. Pet. oblique ligulat. obtus. qu. sep. paulo brevioribus. Lab. e basi subunguiculata cuneato dilatato, antice trilobo, lob. lateral. obl. obtusiss. subtruncat. intermedio obtusissimo subexciso bene longioribus, callo ligulato antice altius bicornuto, e basi usq. infra apicē labelli decurrente, labello toto glabro, 5 m̄ lgo ad apicem loborū lateraliū 5 m̄ lato. Col. brevi, clinandrio dorso apiculato, pede apice intus breviter carinato, anthera cucullata glabra ovario pedicellato 5 m̄ lgo. – Fl. Augusto.
Borneo. Auf Bäumen in Wäldern b. Moeara Kelindjau Schl. n. 13564). Nahe verwandt mit D. rhizophoreti Ridl. durch den Lippencallus mit 2 Hörnern verschieden.

Dendrobium cuneatum Schl. (Typ. herb. Schl.) Epiphyt. dependens ad 60 cm lg. rhizomate abbreviato. Caulib. vulgo simplicib. interdū paucirramos. basi vaginati, deinde bene foliat. apicē versus in parte florifera efoliat. vagin. dissit. donat. supra basin vix ampliat. Fol. more sect. equitantib. subfalcato-lanc. acut. v. subacuminat. coriac. dorso vagin. except. 3–4½ cm lg. medio fere 5–7 m̄ lt. Florib. in fascicul. axillar. distich. pluriflor. apicē versus caulis. Sep. intermedio ovato subacuto 2½ m̄ lgo. lateral. aequilg. margine anteriore in dimidio inferiore

valde dilatat. 3,5 m̄ lgt. Pet. oblique lin.-ligulat. subacut. sep. subaequilg. Lab. e basi subunguiculata late cuneato antice truncato, subinconspicue serrato-dentato, callo in ungue in medio laminae contracto, margine serrulato mox decrescente, lab. c. 3½ m̄ lgo, apice 3 m̄ lt. Col. brevi crassiuscula, clinandrio tricuspidato anthera cucull. antice truncata, ovario pedicell. clav. 5 m̄ lgo. – Odoff

Banda. auf Bäumen an Felsen am Gunong Api (Schl. n. 13664)

Mit d. Mo. Ferlanei F. v. Müll. verwandt, durch kleinere Blt. & d. Lab. unterschieden. Blt. gelbl. weiss mit violetten Längsstreifen auf Sep. & Pet.

455. Dendrobium fugax Schl. – (Typ. herb. Schl.) Epiphyt. erectū v. patulū, ad 75 cm altū, pluricaule, rhizomate valde abbreviato, caulib. supra basin in pseudobulbos fusiformes quadrangulos 5-7,5 cm lgos, medio fere 1.5-2 cm diam. incrassat. deinde attenuat. paulū compress. ad mediū fere foliat. supra vagin. amplectentib. obtect. Fol. patentib. ellipt. obtus. coriac. 5-8½ cm lg. medio fere 1½-2½ cm lt. Florib. versus apicē caulis in fascicul. axillarib. pluriflor. bract. mox lacerat. ovario pedicellato 8 m̄ lgo clavato fere aequilg. florib. ill. D. crumenati lw. similib. sed paulo minorib. Sep. interm. ovato-elliptico, obtuso, c. 1,1 cm lgo, lateral. aequilg. basi antice valde dilatat. basi 1,4 cm ~~longo~~ lto Pet. subfalcat. anguslius oblanceol.-spathulat. obt., sepal. subaequilg. Lab. e basi cuneata 3 lob. 1,8 cm lgo, lob. lateral. obliqu. abbreviato-rotundat. intermedio late cuneato, margine serrulato, antice breviter exciso, lateralib. multo majore, carina depressa lineari, apice 3 dentata e basi labelli ad basin ung. lobi intermedii decurrente. Col. crassiuscula, pede longius producto infra apicē in facie callo rotundato verruculoso ornato, anthera cucull. antice truncata. – Fl. Maio.

Sumatra. Auf Bäumen am Sungei Lalab, Distr. Indragiri (Schl. n. 13297)

Verwandt mit D. crumenatū, ~~verschieden~~ durch d. Lab. & d. Callus am

Säulenfuss. Vergl. auch D. Schmidtianum Kränzl. Koh-Chang.

Dendrobium koeteianum Schl. (Typ. herb. Schl.) 456

Epiphyt. erectu ad 30 cm altu, rhizomate valde abbreviato, caulib. supra basin vulgo ovoideo-incrassat. ceteru gracilib. tereticuscul. vagin. foliorū arctius amplectantib. ± obtect. supra basin 8 ad 4 mm, medio fere 2 mm diam. Fol. subulat. acut. rigidiuscul. carnosul. 3–5 cm lg. internodia vulgo paulū superantib. Florib. in fasciculo axillarib. pauci fl. versus apicē caulis albid. bract. ovario pedicellato clavato, 6 mm lgo brevioribus mox laceratis, Sep. interm. obl. subacuto 5 mm lgo, lateralib. aequilgo, basi antice valde ampliatis, 6 mm lt. Pet. oblique elliptic. obtus. sep. fere aequilg. Lab. e basi subunguiculato-cuneata dilatato, 3lobo, 8 mm lgo, lob. lateral. cuneato-suborbicularib. denticulat. intermedio lateralib. simili, tamen paulo majore, denticulato, lineis 3 parallel. incrassat. e basi ad basin lobi interm.

Borneo. Bei Samarinda, im Staate Koetei. (Schl. n. 13342) Im Juli soeben verblüht. Gehört vielleicht trotz ihrer runden Spitzen Bl. in d. Nähe von D. crumenatum Sw. Blt. offenbar weiss.

Dendrobium Morrisonii Schl. (Typ. herb. Schl.) Caulib. teretib. bene foliat. vagin. folior. mox emarcid. denuo sulcat. 6–7 mm diam. Fol. lanceol-elliptic. acuminat. papyrac. 10–13 cm lg. infra mediū 2–2½ cm lt. racem. axillarib. abbreviat. plurifl. bract. patentib. lanc. acut.-v. acum. ovario pedicellato clavato, brevioribus. Florib. ill. D. Smilliae F. v. Müll. similib. aequimagnisque niveis, Sep. intermed. lanceol. 5 mm lgo. lateralib. fere aequilg. subacut. valde obliqu. ~~extr~~ basi antice valde dilatat. basi 6 mm lgis. Lab. e basi lin.-unguiculata elliptico-spathulato, obtusiusculo, 1.1 cm lgo, supra mediū 4 mm lato ecarinato. Col. brevi crassiuscula, clinandrio tridentato, dentib. obtus. intermedio lateralib. paulo longiore.

Neue Hebriden. Anumey auf Aneiteum (W. Morrison)

Material ziemlich unzulänglich

Dendrobium neo-ebudanum Schl. (Typ. herb. Schl.) Pluricaule c. 35 cm lg. rhizomate valde abbreviato. Caulib. cylindr. gracilib. basi paulū attenuat. vagin. foliorū obtect. Fol. anguste lanc. acut. v. acum. papyrac. 7-10 cm lg. infra mediū 8-14 m̄ lt. fascical. florū lateral. bract. lanc. acum. ovario pedicellato clavato, 2 cm lgo multoties brevioritb. Floritb. illis D. Lawesii F. v. Müll. paulo minorib. similib. q. Sep. interm. elliptico-ligulato obtusiusculo c. 1.1 cm lg., lateral. fere aequilg. acut. obliqu. basi antice valde dilatat. 1.5 cm lt. Lab. e basi lin.-unguiculata cuneato, antice concav.-incurvo, apice lacerato, 1.8 cm lgo, infra apicē 7 ūmulato, Col. brevi, crassiusc. glabra, clinandrio 3 dentato, dente intermedio (dorsali) lateralib. multo majore, ovario pedicellato clavato c. 2 cm lgo. (B. Pet. nicht beschrieben!)

Neue Hebriden. - (Dr. A. Morrison)

Nächstverwandt ist D. Lawesii F. v. Müll. Schlauers Stämme der Fehlen d. Querlamelle auf d. Nagel d. Lab. sind d. Hauptunterschied.

457 Dendrobium platyphyllum Schl. - (Typ. herb. Schl.) Epiphyt. dependent, usq. ad 1 m lg. pluricaule, rhizomate valde abbreviato, caulib. vulgo singul. interdū paucirames, compress. vagin. persistentib. foliorū vulgo obtect. parte superiore florifero efoliat. vagin. amplectentib. donat. Fol. equitantib. ovat. v. ovato-lanc. acut., vagina excepta dorso 4 1/2 - 5 1/2 cm lg. medio fere 1.2-1.7 cm lat. Florib. apicē versus caulis in fascicul. axillar. pluriflor. bract. ovario breviter pedicellato clavato. 4 m̄ lgo paulo brevioritb. Sep. interm. ovato subacuto c. 3.5 m̄ lgo, lateralib. fere aequilg. antice basi conspicue dilatat. basi 4 m̄ lat. Pet. oblique elliptic. obtus. quā sep. vix brevioritb. Lab. late cuneato antice 3 lobo, lob. lateral. falcato obl. obt. intermedio abbreviato obtusissimo, quā laterales brevi ore callo lin.-cuneato antice truncato e basi labelli ad basim

lobi intermedii, toto labello 4.5 m̄ lgo infra apicē 5.5 m̄ lto. Col. brevi crassiuscula, clinandrio dorso apiculato, anthera cucull. antice rotundata. — Fl. Maio.

Borneo. An einem Gartenzaun auf d. Insel Labuan, vielleicht cult.? Wird auch im Garten v. Buitenzorg kultiv. unter n. 127 von d. Insel Pulau Telo stammend. Mit D. rhizophoreti Ridl. verwandt.

Dendrobium rhopalobulbum Schl. — (Typ. herb. Schl.) Epiphyticū dependens, ramosū, ad 45 cm lg. rhizomate cauliformi laxe pseudobulb. obsesso, terete, vagin. amplectentib. obtecto. Pseudobulb. clavat. teretiusc. apice 1-foliat. 3.5 — 5.5 cm lg. supra mediū 6–7 m̄ diam. Fol. anguste elliptico-ligulato, obtuso, coriaceo, 10–14 cm lg. medio fere 2–2.3 cm lt. Flores infra basin foliorū e pseudobulb. natis, singul. illis D. Schinziani Rolfe similib. Sep. interm. ovato-obl. subacuto, c. 5 m̄ lgo, lateralib. aequilg. basi antice 5 m̄ lat. Pet. oblique elliptic. subacut. sepal. fere aequilg. Lab. e basi cuneato 3lobo, lob. lateralib. parvul. triangul. subacut. intermedio quā laterales multoties majore e basi quadrata ampliato 2lobo, lob. oblique obl. obt. carin. 2 parallel. e basi labelli usq. supra basin lobi intermedii decurrentib. toto lab. 1.2 cm lgo. ad apices loborū lateraliū 3 m̄ lato. lobo interm. 5 m̄ lto. Col. brevi crassiuscula, clinandrio margine minute serrulato, anthera cucull. antice truncata. — Fl. Maio.

Sumatra. Auf Bäumen am Sungei Lalalo ~~Dist.~~ Indragiri.
(R. Schlechter n. 13271)

Zur Sect. Dermotrichū gehörig & mit D. Schinzianū Rolfe verwandt. jedoch durch grössere & schlankere Pseudobull. & d. Lab. unterschieden. D. conchophyllū Hoor. f. gehört auch in diese Verwandschaft.

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Dendrobium tetralobum Schl. (Typ. herb. Schl.) Epiphyt. dependens pluricaule ad 1 m lg. rhizomate valde abbreviato, caulib. vulgo simplicib. interdū paucirramos. compress. dense foliat. apicē versus florifero efoliato, vaginulis obsessis. Fol. equitantib. ~~versus~~

oblique ovato-lanc. acut. coriac. dorso, sine vagina 2-2½ cm lg. medio fere 6-8 mm lt. Florib. apice versus caulis in fascicul. axill. distich. pluriflor, bract. ovat. mox lacerat. ovario breiter pedicell. clavato 3 mm lgo paulo breviorib. florib. inter minores generis Sep. interm. ovato-obl. obtusiusc. 3 mm lg, lateralib. aequilg. basi antice bene dilatat. c. 3,5 mm lt. Pet. oblique lin-ligulat. obt. sepal. fere aequilg. Lab. e basi cuneato-unguiculato 4-lobo, lob. inferiorib. obl.-triangul. obt. lob. anteriorib. divergentib. lanc.-falcat. obtus. quā inferiores paulo longiorib, denticulo minuto interjecto, callo obl. quadrato in ungue, lab. toto 3 mm lg. ad apices lobor. anteriorū 4 mm lt. Col. brevi, crassiusculo, clinandrio amplo edentato. – Fl. Julio.

Borneo: Bei Samarinda, im Staate Koetei (R. Schl. n. 13329)

Unter sämtl. Aporum - Arten durch d. Form der Lab. gekennzeichnet.

Dendrobium Usterii Schl. (Typ. herb. Schl. et Polytech. Turic.)

Epiphyt. erectū, ad 20 cm altū, rhizomate valde abbreviato, Caulib. v. potius pseudobulb. subfusiformi cylindrac. mox longitudinaliter sulcat. vagin 3 v. 4 hyalin. arcte amplectentib. primū vestit. apice 1-foliat, lucid. 6-9 cm lg, supra mediū 5-6 mm diam. apice & praesertī basin versus paulū attenuat. Folio rigido, subulato acuto 6-9 cm lg. vix 2 mm diam. superne sulcato, racemo simplice terminali, folia vulgo ± excedente, lignescente, rigido. Florib. in fascicul. distich. vulgo pauciflor. more D. crumenati Sw. (cui inflorescentia similis sed minor), bracteis mox lacer. ovario pedicellato clavato 6 mm lg. breviorib. Sep. interm. obl. obtusiusculo, 4 mm lg. lateralib. aequilg. basi antice valde dilatat. basi 4 mm lat. Pet. oblique ligulat. in dimidio superiore antice paulo dilatat. sub-

acut. sepal. subaequilg. Lab. e basi longius cuneata trilobo, 7mm lg. lob. lateral. abbreviat. obtusat. intermedio obl. quadrato, apiculato multo majore, lin. 3 incrassat. e basi in mediū lobi intermedii decurrentib. apice undulat. lin. 2 brevib. undulat. in lobo medio adject. Col. brevi, clinandrio 3-cuspidato, anthera cucull. antice (truncata.

Philippinen. Auf Mangroven d. Ins. Negros. (A. Usteri)

Durch ihren Habitus vor allen andern Arten unterschieden.

Dendrobium vulcanicum Schl. (Typ. herb. Schl.) 459

Terrestre, erectū, pluricaule, 30–45 cm altū, rhizom. valde abbreviato. Caulib. erect. vulgo simplicibus, teretiuscul. bene foliat. vagin. foliorū arcte amplectentib. persistentib. ± obtect. mox longitudinaliter sulcat. gracilioribus 2–3mm diam. Fol. anguste lanceol. acutat. papyrat. 4,5–7 cm lg. medio v. infra mediū 4–8mm lt. internodia plus 2plo superantib. Infloresc. versus apicē caulis 1–2-flor. pedunculo ovario pedicellato paulo ~~longiore~~ breviore, bractea parvula ovario 1,5 cm lgo ~~multo~~ multo breviore. Florib. in sectione inter majores. Sep. interm. ovato, obt. c. 1,3 cm lg. lateral. fere aequilg. basi antice valde dilatata, c. 1,3 cm lt. Pet. oblique obl. ellipticis subacut. glabr. sepalis subaequilg. Lab. e basi unguiculata cuneato-3lobo, c. 2 cm lg. lob. lateral. haud bene evolut. intermedio late rotundato obtusiss. lamella transversa, bicruri, crurib. V-formiter divergentib. in medio unguis. Col. brevi, crassiusc. clinandrio 3dentato, anthera cucull. antice rotundato-truncata.

Banda. Auf Steinen & am Boden auf d. Gunong Api unterhalb d. warmen Spitze. (R. Schl. n. 13660) Fl. Octobri.

Eine nicht unansehnliche Art mit roten Blüten, (Nicht verwandt. mit D. Horei)

Dendrobium xanthoacron Schl. (Typ. herb. Schl.) Epiphytic-

in trunc. arborū, patulū, multicaule, 7–8 cm lg. rhizomate valde

abbreviato, caulib. simplicib. dense foliat. Angraecum distichum Lindl. in mente revocantib. Fol. falcato-obl. obt. equitantib. 5-8 mm dorso lg. medio fere 3-5 mm lt. rigid. coriac. Florib. apice caulis singul. v. pauci fasciculat, involucro bifoliato protect. foliis involucri equitantib. oblique obl. obt. foliis caulis paulo majorib. brunescentib.-flavid. bract. ovat. subacut. ovario pedicellato 5 mm lgo subaequilg. Florib. in sectione inter majores ill. D. Leonis Rchb. f. subaequimagn. Sep. interm. ovato obtusiusc. 5 mm lgo. sep. lateral. fere aequilg. valde oblique. basi antice valde dilatat. 6 mm lg. Pet. oblique elliptico-ligulat. obtus. sep. interm. subaequilgis. Lab. cuneato-obl. dimidio antico undulato, antice profundius bilobato, lob. falcato-obl. obt. criolis parval. spars. brevib. ornatis, carina incrassata e basi ad apicem labelli decurrente, Lab. 8 mm lgo. Col. brevi, clinandrio tridentato, anthera cucullata glabra. – Blt. im Juli. Blt. bräunlich gelb.

Borneo. auf Bäumen b. Samarinda im Staate Kutei (Schl. n. 13332).
Verwandt mit D. Leonis Rchb. f. & D. prostratum Ridl. Von beiden durch d. Tracht u. & d. Labell. unterschieden.

460 Eria indragiriensis Schlt. (Typ. herb. Schl.) Epiphyt. dependens ad 50 cm lg. rhizomate valde abbreviato, caulib. teretiusc. bene foliat. simplicib. vagin. persistentib. folior. arcte amplectentib. rufo-villos. omnino obtect. 5-6 mm diam. Fol. distich. lanc. v. lanc. elliptic acumin. primum rufo-velutin. superne demum glabrat. 10-15 cm lg. medio v. infra medium 2,3-3,2 cm lt. racem. nutantib. axillarib. laxe 8-15-flor. distich. rufo-villos. folia excedentib. pedunculo paucivaginato, terete, villoso, bract. ovat. obtusiuscule & breviter acumin. ovarium cylindricum dense rufo-villosum 7 mm lg. excedentib., Sep. interm. lanc.-ligulato obtuso, extus rufo-villoso, intus glabro c. 2 cm lg. lateralib. valde dilatat. intermedio fere aequilg.

basi 1.8 cm lt. extus resp. villosul. intus glabr. Pet. oblique ligulat. obt. glabr. quā sep. paulo breviorib. Lab. circuitu obovato, 3lobo, lob. lateral. obl. falcat. obt. intermedio cuneato-bilobo, conspicue majore, carinis 2 e basi ad mediū labelli usq. carinisq. 2 e medio usq. infra apicē labelli decurrentib. tuberculo obl. in apice, toto lab. c. 2 cm lgo. medio fere 1.3 cm lt. Col. semiterete marginata. anthera anguste cucull.-galeata. pollin. angust. – Fl. Aprili.
Sumatra. Auf Bäumen am Sungei Lalah, Distr. Indragiri (S. n. 13252)
Trichotiae sp. nahe verwandt mit Tr. ferox Bl (& vielleicht identisch)

Eria mollis Schl. (Typ. herb. Schl.) Epiphytica, dependens pro sect. pusilla. rhizomate valde abbreviato. caulib. simplicib. teretib. bene foliat. vagin. folior. arcte amplectentib. villos. omnino obtect. 2 mm diam. Fol. lanc. elliptic. acutiuscul. utrinq. molliter villos. coriac. 1–2.3 cm. lg. medio fere 3–6 mm lt., racem. axillarib. patul. laxe pluriflor. molliter villos. folia vulgo paulo excedentib. florib. inter minores, subsessilib. bract. ovat. acut v. subacut. villos. quā ovaria subsessilia, cylindrac. molliter villosa 3 mm lg. breviorib. Sep. intermed. ovato obtusiusc. extus villoso, intus glabro, 3 mm lg. lateralib. fere aequilg. sed antice basin versus valde dilatat. ibi 4 mm lt. extus villos. intus glabr. Pet. subfalcato-ligulat. obtus. glabr. quā sep. paulo breviorib. Lab. e basi unguiculata cuneato-dilatato, 3lobo, lobis lateralib. oblique obl. obt. intermedio 2plo majore suborbiculari, antice breviter exciso, callo obl. parvulo, papilloso in medio lobi intermedii, ungue puberulo, toto labello 4 mm lgo. Col. brevi, pede basi callo puberulo ornato. – Fl. Maio
Sumatra. Am Sungei Lalah. Distr. Indragiri. (Schl. n. 13284)
Blt. grünlich gelb., nächstverwandt ist E. asperina Kchl. f.

Eria monophylla Schl. – (Typ. herb. Schl.) Epiphytica, 14–18 cm alta, rhizomate abbreviato, vagin. obtecto. Pseudobulb. cylindrac. apice paulū attenuatis, unifoliat. 2–3,5 cm lg. medio fere 4–6 mm diam.

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Fol. angustius lanc.-ligulato, apice inaequaliter bilobulato, obtusiusc. basin versus angustato, coriaceo, glabro, 10–15 cm lg. medio fere 1,3–1,8 cm lt. racemo juxta apicē pseudobulbor. juvenilium nato, breviter pedunculato, subdense 6–15-floro pedunculo rhachique stellato-tomentos. Sep. interm. obl. obt. extus stellato puberulo, vix 4 mm lgo, lateralib. intermedio fere aequilg. obt. antice basi bene ampliat. extus stellato puberul. Pet. oblique obl.-ligulat. obtus. glabr. 3 mm lg. Lab. e basi obl. marginib. columnae adnata paulū dilatato, trilobo lob. lateral. ~~intermedio fere~~ triangulo-rotundat, parvulis, intermedio bene majore subquadrato, antice truncato, callo minuto in basi labelli oblongo, squam. 2 obl. obt. ampl. in disco v. medio, lab. toto 4 mm lgo. Col. brevi, pede longius producto glabro anthera cucull. – Fl. Augusto.

Borneo. In Wäldern am Long Sele, Staat Koetei (Schl. n. 13485)

Hymeneria aber durch d. 1 blättr. Pseudobulb. gekennzeichnet (35)

Chitonanthera? Mac Gregorii Schl. (Typ. bot. Schl.). Epiphytica decumbens v. ascendens, radicans, ramosa, ram. ramulisq. gracilib. teretib., vagin. foliorū persistentib. omnino obtect. laxe foliat. Fol. patentib. ad vaginā articulat. subulato-filiformib. acut. glabr. 1–1,8 cm lg., racem. in axill. foliorū natis, subdistich. sub laxe 10–20-flor. folia paulo excedentib., bract. lanc. acumin. glabr. florib. subaequilg. Sep. ovat. obtusiusc. vix 1 mm lg. lateralib. paulo obliqu. omnib. patentib. Pet. obl. obt. quā sep. fere 3plo minorib. Lab. pet. aequilg. oblique suborbiculari obtuse & breviter acumin. marginib. lateral. concavo-incurv. glabro. Col. brevi, cylindracea, stigmate humili, rostello amplo, anthera subreniformi obtu-

riacula, pollin. ut videtur 4, ovario breviter pedicellato clavato, glabro vix 1 mm lgo. — Fl. Junio

British New Guinea. Crest of Owen Stanley Range (Sir W. McGregor)

Durch d. steifen Zweige u. stielrunden Bl. von d. andren Arten d. Gattung unterschieden. Es standen nur wenig Blt. zur Verfügung also etwas zweifelhaft.

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Bulbophyllum apertum Schl. — ([illegible] Schl.) Epiphyt. in ramis arborum repens, 15–20 cm [illegible], rhizomate elongato, flexuoso, vaginis [illegible] obtecto, terete. pseudobulb. anguste ovoideo-conicis, [illegible], valde [illegible] [illegible] cm alt. [illegible] basin c. 7 mm diam. unifoliat. Fol. [illegible] coriaceo, basi angustato, basi [illegible] 15–[illegible] cm [illegible] [illegible] pseudobulbor. [illegible] vag. [illegible] [illegible] bracteis ovata, [illegible] pedicello multo breviore. Sep. ovato-obl. [illegible] breviter acuminat, intermedio [illegible] mm lgo. lateralib. [illegible] paulo [illegible] [illegible] [illegible] [illegible] [illegible] obtuso margine minute serrulato apice [illegible] [illegible] mm lgo. [illegible] [illegible] et [illegible], [illegible], ovario [illegible] cylindraceo glabro [illegible] mm lgo. — Fl. Octobri.

[illegible] (Schl. 13653)

[illegible]

[illegible]

Bulbophyllum [illegible] Schl. — ([illegible] Schl.) Epiphyt. in [illegible] [illegible] arborum [illegible], rhizomate flexuoso [illegible] vagin. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] valde [illegible]

[illegible]

lorato oblusiusculo basi conspicue angustato subpetiolato, coriaceo, c. 17 cm lgo. medio fere 4.5 cm lt. scapo erecto c. 23 cm alto, gracili, terete, vagin. paucis arcte amplectentib. obsesso, racemo sub denso c. 15-floro, bract. ovato-lanc. subacuminata ovario pedicellato, clavato, glabro, 6 mm lgo multo brevioribus floribus mediocrib. Sep. intern. obl. obt. ciliato 5 mm lgo lateralib. aequilg. obt. basi antice dilatat. ciliat. Pet. oblique obl.-ligulat. obt. apice versus puberul. quam sep. paulo breviorib. Lab. petalis aequilg. carnoso, obl.-ligulato obt. basi auriculato incurvulo, minute papilloso. Col. brevi crassiuscula, brachiis parvul. triangul. acut., antheræ anthera brevioribus. anthera galeato-cucullata, antice crassa papilloso-puberula. – Fl. Aprili. Blt grünlich m. karminroten Streifen
Sumatra. In d. Wäldern um Sungei Lalah, Distr. Indragiri (Schl. n. 13241). Steht vereinzelt unter d. malayischen Arten, ähnelt den jungen einigen individuen.

463 Bulbophyllum indragiriense Schl. (Typ. herb. Schl.)
Epiphyticum, dependens, ad 15 cm lg. rhizomate terete, dense pseudobulb. obsesso. Pseudobulb. ascendentib. oblongoideo-cylindrac. 1-foliat. ad 1 cm lg. medio fere 3-4 mm diam. Fol. ligulato-lorato, acuto, basi angustato, coriaceo. 2-3½ cm lgo, medio fere 5-7 mm lato. Floribus more B. clauterlini Griff. e rhizomate nat. vulgo singul. pedunculo brevissimo, vaginato. Bractea ovata. acuta, ovario subsessili cylindraceo c. 1½ mm lgo fere aequilongo. Floribus inter minores purpurei. Sep. intern. ovato-obl. obt. 3 mm lgo, lateralib. paulo longiorib. usq. infra apicem connat. apicib. liber. obtus. Pet. albis oblique suborbicularib. apiculat. 1 mm lg. Lab. e basi cuneata ellipticо, obtusiusculo, minute ciliato, carnosulo, c. 2 mm lgo. Col. brevi crassiuscula, brachiis subfalcato-erect. acuminis antherā

excedentib., anthera cucull. obtusa. Fl. Aprili.
Sumatra. Am Sungei Lalah, Distr. Indragiri. (Schl. n. 13242)
Gehört in d. Verwandtschaft von B. clandestinum Griff. durch d. stumpfen Sepalen, das bewimperte Lab. & d. roten Blt. unterschieden.

Cirrhopetalum adenophorum Schl. – (Typ. herb. Schl.) Epiphyticū in ram. arborū repens, ad 16 cm altū, rhizomate crassiusculo, dense vagin. arcte amplectentib. obtecto, terete. Pseudobulb. erect. ovoid. 4-angularib. 1-foliat. $2\frac{1}{2}$–3 cm alt. supra basin 1.2–1.5 cm diametro. Folio erecto, elliptico, obt., in petiolū attenuato c. pet. 9–11 cm lg. medio fere 2.8–3.5 cm lt. coriaceo, scapo erecto gracili, folia paulo excedente, terete, vaginul. pauc. dissit. obsesso, racemo umbelliformi c. 6–10-floro, bract. lanc. acumin. ovario pedicellato 4 mm lgo brevioribus, florib. ill. C. gamosepali Griff. similib. vix majorib. Sep. intermedio ovato-setaceo-acumin. ciliato, 6 mm lgo. lateral. porrect. oblique lineari-ligulat. obtusiusc. glandul. sessilib. sparsim donat. basi libera excepta infra apicē usq. cohaerentib. $2\frac{1}{2}$–3 cm lg. Pet. oblique ovat. setaceo-acumin. ciliat. quā sep. interm. paulo minorib. Lab. carnosulo, ligulato, obt. subtus carinato, glabro, 4 mm lgo. Col. brevi ebrachiato, anthera galeato-cucull. antice excisa, glabra. Fl. Julio.
Borneo. Bei Samarinda, Staat Koetei (Schl. n. 13343)
Nahe verwandt mit C. gamosepalū Griff. durch d. sitzenden Drüsen an d. seitl. Sepalen & d. Säule verschieden.

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Cirrhopetal. borneense Schl. – (Typ. herb. Schl.) Epiphyt. in ramis arborū repens, ad 13 cm altū, rhizomate crassiusc. terete, dense vagin. amplectentib. appress. obtectis, pseudobulb. haud valde approximat. ovoideis 4angularib. 1-foliat. 1.5–2 cm alt. supra basin 8–12 mm diam. Fol. erecto anguste elliptico-ligulato obt. basin versus in petiolū brevē angustato c. pet. 7–11.5 cm lg. medio 2–$2\frac{1}{2}$ cm lt.

scapo gracili erecto v. ascendente, terete, vaginul. pauc. dissit. obsesso, racemo umbelliformi c. 10-floro, bract. lanc. acum. ovario pedicellato clavato 6 mm lg. fere aequilg. Sep. interm. ovat. setaceo-acum. ciliato c. seta apicali 9 mm lg. lateralib. medio tantum cohaerentib. oblique ligulat. obt. dimidio anteriore genuflexo-decurvis 1,5 cm lgio, setaceo-acumin. ciliat. 6 mm lgir. Lab. carnosulo, ligulato, obtuso, glabro, medio vix constricto curvato, 4 mm lg. Col. brevi, brachiis subulat. parvul. anthera paulo brevioribus. anthera galeato-cucull. glabra antice setosa. Fl. Julio.

Borneo. An d. Ufern d. Long Wahau bei Moeara Marah, im Staat Koetei (Schl. n. 13401). Ausgezeichnet durch d. kurzen kniefömig nach unten gebogenen seitlichen Sepalen; gehört in d. Verwandtschaft von C. gamosep. Griff.

Cirrhopetalum pallidum Schl. (Typ. herb. Schl.) Epiphyticum in ramis arborum repens, ad 14 cm altum, rhizomate elongato, terete, vagin. obtecto, pseudobulb. erect. dissit. ovoid. obscure 4angul. 1-foliat. c. 1 cm alt. supra basin 7 mm diam. Fol. erecto ellipt.-v. anguste ellipt. ligulato, obt. 6-10 cm lg. medio fere 1,8-2,5 cm lt. basin petiolum breve attenuato, coriac., scapo gracili, erecto, vaginul. pauc. dissit. obsesso, racemo umbelliformi, dense 15-30-floro, bract. lanc. acumin. ovario pedicellato, clavato 3 mm lg. fere aequilg. Floribus patentib. patulisve pallide flav. Sep. interm. ovato, setaceo-acumin. 5 mm lgo. lateralib. porrect. oblique ligulat. obt. tertia parte basilari connat. ceterum liber. 1,5 cm lg. Pet. ovato-lanc. acut. falcat. dimidio inferiore breviter lacerato-dentat. vix 4 mm lg. Lab. carnosulo ligulato obtuso, subtus longitudinaliter sulcato, vix 2 mm excedente. Col. brevi crassiuscula, brachiis minut. dentiformib. anthera brevioribus. anthera cucull. antice setosa. — Fl. Julio.

Borneo. Am Flusse b. Samarinda, Staat Koetei (Schl. n. 13374) Verwandt mit C. citrinum Ridl., unterschieden durch d. Petalen.

Luisia liukiuensis Schl. – (Typ. herb. Schl. & Tokyo) – Epiphytica patula, ad 35 cm lg. radicib. crassiuscul., caule vulgo simplice, bene foliato, vagin. foliorū arcte amplectantib. nervosi omnino obtecto. Fol. teretib. subacut. carnos. 8–11 cm lg. c. 2½ mm diam. paulo arcuat. racem. axillarib. abbreviat. pauciflo., bract. parvul. late ovat. obt. ovario breviter pedicellato, clavato multoties brevioribus. Florib. ill. L. teretifoliae Bl. fere aequimagn. Sep. ligulat. obt. c. 7 mm lg. medio fere 2½ mm lat. v. sublatiorib. Pet. sepalis bene similibus & fere aequemagn. paulū obliqu. glabr. Lab. carnoso 3lobo, basi concavulo, lob. lateral. parvul. obl. obt. paulo incurv. lobo interm. multo majore obl.-ligulato obt. toto lab. 7 mm lgo. lobo intermedio fere 2½ mm lt. col. brevi crassiuscula, anthera pollin. haud visis. – Verblüht im Dez.

Liukiu Inseln. Ins. Oshima – (T. Uchiyama)

Soll sich von allen andr. Arten durch d. Labell. unterscheiden. War schon verblüht.

Adenoncos borneensis Schl. (Typ. herb. Schl.) Epiphyticū, patulū ad 30 cm lg. Caule teretiusculo bene foliato, omnino vagin. foliorū nervos. obtecto. c. 4 mm diam. Fol. ligulat. oblique obt. apice mucronat. lucid. carnoso-coriace. 3½–5 cm lg. medio fere 6–13 mm lt., racem. axillarib. valde abbreviat. pauciflo. bract. late ovat. mucronulat. ovario subsessili 6 mm lgo multo brevioribus. Florib. viridib. in genere magn. Sep. ovato-lanc. acumin. 6 mm lg. lateralib. paulo obliqu. Pet. anguste lin.-ligulat. acuminat. obliqu. Lab. subcuneato-obl. concavulo apiculato, basi margine utrinq. dente lineari acuto ornato, carnoso, 7 mm lg. supra mediū 4 mm lato. Col. brevi, crassa, apice utrinq. dente brevi carnoso donata, rostello valde abbreviato, anthera cucull. antice attenuato, apice breviter truncata, pollin. 4 obliqu. obovoideis, stipite sublineari, apicē versus paulū dilatato, glandula obl. postice minute excisa. – Fl. Julio.

Borneo auf Bäumen am Sungei Penang b. Samarinda, im Staate Koetei (Schl. n. 13352)

Mit Ad. major Ridl. verwandt.

466 Taeniophyllum borneense Schl. (Typ. herb. Schl.) Epiphytic. acaule pusillū ad 3 1/2 cm altū, aphyllū, radicib. applanat. elongat. flexuos. glabr. c. 2 mm lt. racem. more T. obtusi Bl. ad basin floriferis, distich. elongat. rhachi minute puberula, bract. parvul. ovato-triangul. obtus. minute puberul. ovario pedicellato, ad 2 mm lg. glabro bene brevioris. Florib. ill. T. obtusi Bl. subaequimagn. Sep. intermed. lanc.-elliptico subacuto, 4 mm lg. lateralib. intermedio similib. subfalcato-obliqu. fere aequimagn. Pet. angustius & oblique lanc. acumin. quā sep. paululo brevioris. Lab. circuitu lanc. concavo, acuto, apice incrassato, ante ostiū calcaris lamella praedito pet. aequilgo. exappendiculato, calcari globoso, 5 mm lgo, Col. brevi, rostello linguiformi bifido, anthera cucull. breviter & obtusiusc. acumin.. Fl. Augusto.

Borneo. Bei Moeara Bangkal, im Staate Koetei (Schl. n. 13563)

Mit T. obtusū Bl. verwandt, ausgezeichnet durch d. Lab. & Behaarung der Rhachis.

Taeniophyll. gracillimum Schl. (Typ. herb. Schl.) Epiphytic. pusillū, acaule, ad 5 cm alt. aphyllū, radicib. applanat. elongat. flexuosulos. 3 mm lt. Scap. gracillim. capillar. squamul. perpauc. minut. arcte amplectentib. obsess. racem. distich. 6-20-flor. sublax. glabr. 4-12 mm lg. rhachi subflexuosa, bract. parvul. ovato-triangul. obt. glabr. ovario 1 1/2 mm lgo pedicellato multo brevioris. Florib. inter minores flavescentib. Sep. ligulato-elliptic. obtusiusc. 2 1/2 mm lg. lateralib. paulū obliqu. Pet. oblique obl. obt. basi subito paulo angustatis quā sep. paulo brevioris. Lab. circuitu lanc. acumin. concavo, apice appendice brevi incurvo donato, basi ante ostiū calcaris lamella transversa bicruri donato, pet. aequilongis, calcari subgloboso c. 5 mm lg. Col. brevi, rostello acuminato bifido, anthera cucull. antice truncato-obtusata, pollin. 4 oblique obovoideis, stipite lineari, polliniis fere dimidio longiore glandula obl. obt. parvula. – Fl. Augusto.

Borneo. An jungen Zweigen auf Bäum. am Long Dett (Staat Koetei) (Schl. n. 13556)

Durch d. äusserst dünnen Blt.schäfte & breiten Wurzeln charakterisiert) Scheint mir fast gut zu sein.

Taeniophyll. sumatranum Schl. (Typ. herb. Schl.) Epiphytic: in ramis arborū, pusillū, gracile, patulū, ad 9 cm longū, acaule aphyllū, radicib. applanat. elongat. flexuos. 1½–2 mm lt. pedunculo tereti ancrals vaginul. perpauc. minut. praedito, racemo elongato ∞ floro, sublaxo ad 7 cm lg. rhachi subflexuosa, bract. ovato-triangul. obt. quā ovariū 1 mm lg. clavat. pedicellat. brevioribus. Florib. viridibus interminores gene: sep. lanc.-ligulat. acut. mediū usq. connat. c. 2½ mm lg. lateralib. paulū obliqu. Pet. liberis sep. similib. sed paulo brevioribus. Lab. lanc. acuto v. subacumin. concavo, apice appendice subulato acutissimo infracto praedito, pet. fere aequilgo, calcari ovoideo obt. ½ mm vix excedente. – Fl. Aprili.

Sumatra. An d. Ufern d. Sungei Lalah, Distr. Indragiri (Schl. n. 13244) Charakteristisch durch d. langen Infloreszenzen. verwandt mis T. Alwisii Lindl.

Sarcochilus Burchardianum Schl. (Typ. herb. Schl.) Epiphytic: acaule erectū, ad 7 cm altū, simplex, radicib. filiform. Fol. patentib. oblique elliptico-ligulat. apice inaequaliter & obtuse bilobat., racem. brevib. hispidul. 6–15-flor. pedunculo brevi, bract. ovat. obtusiuscul. patentib. hispidul. ovario pedicellato cylindraceo 1,2 cm lgo puberulo brevioribus. Florib. albid. roseo-pict. Sep. elliptico-obl. obt. extus puberul. intus glabr. 1.3 cm lg. lateralib. paulū obliqu. quā intermed. paulo latiores. Pet. oblique spathulato-ligulat. obtus. subglabr. sep. subaequilg. Lab. carnosulo cucullato concavo, lob. lateral. erect. oblique lanc. acut. apicē versus lacerat. lobo medio breviter 4-lobulato, lobulis subtriangul. acut. margine lacerat., calcari brevi gibberiformi conico, porrecto, apice puberulo infra apicē labelli. Col. brevi carnosula, anthera ellipsoideo-cucullata, obt. glabra. pollin. subglobos., stipite lineari, quā poll. fere 2plo longiore, glandula parvula suborbiculari. – Fl. Aprili.

Sumatra. Auf Bäumen am Sungei Lalah, Distr. Indragiri. (Schl. n. 13250) Eine durch d. complizierte Struktur d. Lab. ausgezeichnete Art.

Sarcochilus Koeteiense Schl. – (Typ. herb. Schl.) Epiphyticū, patulū, acaule, pusillū, c. 9 cm altū, rad. filiform. Fol. (in specimine 1) 4 lanceolato-ligulat.

acumin. subfalcato-obliqu. 5,5-7,5 cm lg. medio fere 8-14 mm lat. coriac. pedunculo gracili, terete, minute squamuloso-hispidulo paucifloro, bract. approximat. parvul. hispidul. ovario pedicellato clavato glabro 4 mm lg. multo brevioribus. Florib. ill. S. sigmoidei Ridl. similib., fere aequimagn. patentib. Sep. conniventib. intermedio angustius ellip~~toideo~~tico-ligulato, oblanceolato, glabro, 6 mm lgo. lateralib. paulo latiorib. aequilg. Pet. oblique subfalcato-ligulat. obtus. glabr. quam sep. paululo brevioribus. Lab. 3lobo, lob. lateral. ~~paulo lati~~ oblique obl. obt. intermedio rhombeo, lateribus paulum involuto, acutis; calcari e basi conica medio constricto, apicem versus ~~sursum~~ inflato brevi ~~crassiuscul~~ obtuso, porrecto, labelli lobum intermedium superante. 8 mm lgo. Col. brevi crassiuscula, rostello brevi bifido, anthera cucull. antice breviter acuminata, pollin. oblique obovoideis, stipite lineari, glandulam versus paulum angustato, glandula oblanceolata, acuta. - Fl. Augusto.

Borneo. In d. Wäldern am Long Sele, Staat Koetei (Schl. n. 13464)
Dürfte mit S. sigmoideum Ridl. verwandt (od. identisch?) sein; d. Helm ist braun, d. Labell. weiss m. rot.

468 Sarcochilus pachyrhachis Schl. (Typ. herb. Schl.)

Epiphyticum. dependens. ad 2.5 cm lgum, radicib. filiform. caule terete, dense foliato, vagin. foliorum obtecto, Fol. oblique ligulat. acutiusc. coriac. basin versus angustat. 7-10 cm lg. medio fere 5-12 mm lt. racem. distich. laxius 10-20-flor. rhachi carnosa, incrassata, glabra, pedunculo terete, vaginul. dissit. obsesso, ad 7 cm lgo, bract. parvul. triangul. acut. v. obtusiuscul. ovario bene brevioribus. florib. ill. S. teretis Bl. similibus, fere aequimagn. niveis. Sep. lanc. acut. glabr. c. 8 mm lg. lateralib. paulum obliqu. pet. quam sep. bene similib. acut. sed paulo minorib.

Lab. calcarato-saccato porrecto, trilobo, lob. lateralib. lanc. triangul. acut. subfalcat. erect., intermedio in dentē triangulū, acutū reducto, minuto, calcari saccato-conico, porrecto 5 m̄ lgo.. Col. teretiuscula pede gracili, rostello bifido, anthera cucullata, antice breviter acumin. pollin. paullo longiore, glandula ovata, obtusa, ovario pedicellato glabro, cylindrac. 7 m̄ lgo. Fl. Julio
Borneo. Auf Bäum. am Sungei Pënang b. Samarinda, Staat Koetei (Schl. n. 13348)
Aus d. Verwandtschaft v. S. teres Bl. durch weitere Blt. & Lab. gut unterschieden.

Thrixspermum affine Schl. (Typ. herb. Schl.) Epiphyticū patulū simplex, 10 cm lg. brevicaule, radicib. filiform. Caule brevi dense foliato, parte inferiore radicante. Fol. ligulat. oblique acut. basin versus paulū angustat. coriac. siccis lucidis, 3½-8 cm lg. medio fere 7-13 m̄ lt., scap. gracilib. rigidiuscul. vagin. 1 v. 2 arcte amplectentib. praedit., racemo disticho illi T. notabilis O. Ktze simillimo 8-25-floro, bract. compress. ovat. acut. ovario pedicellato 5 m̄ lgo clavato brevioribus. Floribus illis T. notabilis simillim. sed paulo minorib. Sep. e basi ovato-lanc. elongato-acuminat. 1,5 cm lg. lateralib. paulo obliqu. Pet. sepalis similib. tamen paulo angustiorib. 1,3 cm lg. Lab. late ovato, sparsim puberulo, elongato-acuminatissimo, basi saccato, lineis 3 elevat. parallel. ornato, 1.3 cm lgo, ad 3,5 m̄ lt. Col. brevi, clinandrio dorso paulo ampliato, rostello subnullo, anthera rotundato-cucull. antice breviter excisa, pollin. oblique ellipsoideis, stipite brevi, subquadrato, glandula brevi, transversa. - Fl. Julio (Schl. n. 13345)
Borneo. Auf Bäumen b. Samarinda, Staat Koetei
Durch d. 3 verdickten Linien am Grunde der Lab. von Thr. notabile O. K. unterschieden. Die Art hat ein pfriemenförmiges Anhängsel & kahles Lab.

Thrixspermum ciliatum Schl. (Typ. herb. Schl.) Epiphyt. 469 erectū, brevicaule, ad 19 cm altū, Caule brevi dense foliato, omnino vagin. foliorū obtecto. Fol. ligulat. apice inaequaliter & obtuse bilobulatis

coriat. 3-7 cm lg. medio 5-10 mm lt. pedunculis erectis folia excedentib. (interdum 2plo) gracilib. teretib. vaginul. pauc. distit. obtect. rhachi abbreviata, bract. lanc. acut. approximat. ovario pedicellato cylindrico c. pedic. 7 mm lgo brevioril. Florib. erect. ill. T. pulchelli O.K. fere aequimagn. Sep. lanc. glabr. c. 1 cm lg. intermedio acuto, lateralib. acumin. paulum obliqu. Pet. oblique ligulat. subacut. quam sep. paululo breviorib. Lab. e basi saccato-concavo late cuneato, trilobo, medio callo subquadrato retuso ornato, lamina puberula 1 cm lga. lob. lateralib. semiorbicularib. abbreviat. ciliat. intermedio anguste lanc. ligulato acuto, ciliato, laterales multo excedente. Col. brevi, anthera cucullata, antice obtusa, glabra. – Fl. Maio.

Sumatra. An Kaffeebäumen am Sungei Lalah. Distr. Indragiri (Schl. n. 13285) Blt. weiss mit gelbem Callus & Sack der Lab. durch d. langen Mittellappen der Lippe ausgezeichnet, mit T. infractum Schl. verwandt.

Thrixspermum falcilobum Schl. – (Typ. herb. Schl.) Epiphyticum dependens, ramosum, basi radicans, c. 40 cm lg. Caule substricto v. subflexuoso, parum compresso, bene foliato, glabro, vagin. foliorum arcte amplectentib. omnino obtecto, Fol. lin. lanc. acumin. carnos. basi subpetiolato-angustat. 8-13 cm lg. medio fere 5-7 mm lt., racem. lateralib. more T. subulati O.K. abbreviat. distich. 3-6-flor. pedunculo brevi vagin. obtecto ad 5 mm lg. bract. carinat. compress. ovario pedicellato cylindr. 7 mm lgo bene brevioril. Florib. pallide flav. ill. T. subulati Rchb. f. similib. & fere aequimagn. Sep. interm. obl. elliptico obt. apice mucronulato. 9 mm lgo, lateralib. oblique suborbicularib. apice mucronulat. intermedio fere aequilg. Lab. e basi saccata late cuneato,

trilobo, lob. lateralib. lanc.-falcatis acuminat. intermedio valde abbreviato obtusissimo, callo transverso bilobulo in medio labelli carin. 3 brevib. e medio ad apicē labelli decurrentib. Lab. e basi ad apicē lobi intermedii 5 m̄ lgo, supra mediū 7 m̄ lt. glabro, callo subulato puberulo in basi. Col. brevi crassiuscula. anthera transversa cucull. antice retusa, pollin. 2 oblongoideis, stipite subquadrato, polliniis breviore, glandula lunata. Fl. Septembri.

Java. In den Wäldern oberhalb Tjibodas (Schl. n. 13606)

Mit T. subulatū Rchb. f. sehr nahe verwandt. Das Lab. weist aber zeigt aber einige Unterschiede, die eine Trennung beider Arten gerechtfertigt erscheinen lassen. – Herrn Schl. vielleicht, mir nicht.

Thrixspermum infractum Schl. (Typ. herb. Schl.) 470

Epiphyticū erectū. 10–15 cm altū. simplex. Caule haud bene evoluto v. brevi, ad 6 cm lgo, dense foliato, terete, glabro, vagin. foliorū dense obtecto. Fol. ligulat. apice inaequaliter et obtuse bilobulat. coriat. 5–8 cm lg. medio fere 8–12 m̄ lt. pedunc. foliis fere aequilg. gracilib. subteretib., rhachi brevi cylindr. vix incrassata, bract. lanc. acut. v. acuminat. ovario pedicellato cylindrac. 7 m̄ lgo glabro pluries 2plo brevioribus. florib. intermediocres generis, niveis, ill. T. pulchelli O. K. fere aequimagn. (alb.) Sep. elliptico-lanc. glabr. 1 cm lg., interm. subacuto, lateralib. obliqu. acuminat. Pet. oblique ligulat. obtusiusc. quā sep. paulo brevioribus. Lab. e basi saccata late cuneato, 3lobo, sep. fere aequilongo, intus medio callo lineari-retuso excepto puberulo, sacco basi intus callo subulato granuloso aucto, lob. lateralib. semiorbicularib. abbreviat. ciliat. intermedio lanc. elongato-acuminato, ciliato, tertia parte apicali subito infracto; anthera cucull. antice retusa, pollin. oblique ellipsoideis, stipite perbrevi, glandula lunata angul. obtusis. – Fl. Junio.

Borneo. auf Bäumen & Sträuchern b. Bandjermasin (Schl. n. 13324)

Mit T. ciliatū Schl. verwandt, jedoch im Lab. ausreichend verschieden.

Thrixspermum maculatum Schltr. (Typ. herb. Schltr.) Epiphyticum erectum, brevicaule, simplex, 6-8 cm altum. Caule brevi omnino vagin. foliorum obtecto. Fol. lin.-ligulat. obtusiuscul. coriac. 4-7 cm lg. medio fere 4-7 mm lt. pedunculo gracilib. teretib. vaginul. pauc. dissit. obsessis, fol. paulo brevioribus. ~~Florib. pallide flav.~~ rhachi cylindr. paulo incrassata ad 1,5 cm lga. bract. approximatis patentib. ovat. obtusiuscul. ovario pedicellato 4 mm lgo bene brevioribus. Florib. pallide flavis erect. Sep. elliptico-obl. subacut. 7 mm lg. lateralib. paulum obliqu. Pet. oblique ligulat. obt. quam sep. paulo brevioribus. Lab. e basi saccata, late cuneato 3lobo, intus callo mediano quadrato excepto in dimidio anteriore puberulo, fasci villoso a basi calli mediani usq. ad basin sacci decurrente, lob. lateral. semiorbicularib. ciliat. intermedio triangulari acuto ciliato, lateralib. paulo longiore, anthera cucull. antice obtusa, pollin. oblique ellipsoideis, stipite quadrato brevi, glandula anguste lunata, perlata, crurib. bene longior

Borneo. In d. Wäldern am Long Wahau, Staat Koetei. (Schl. n. [illegible])
Die hellgelben Blt. zeichnen sich durch 4 goldgelbe Flecken vorn auf d. Lab. u. gelben Sack aus. Sehr charakteristisch ist d. schmal halbmondförmige Klebmasse. - Blüht im August.

471 Thrixspermum Samarindae Schltr. (Typ. herb. Schltr.)

Epiphyticum, erectum, simplex, brevicaule 7-10 cm altum. Caule brevi terete glabro, omnino vagin. foliorum obtecto. Fol. ligulat. apice inaequaliter et obtuse bilobulat. coriac. 5-7,5 cm lg. medio fere 5-10 mm lt. pedunculo fol. fere aequilg. tereticuscul. rhachi abbreviata cylindrat. Sep. lanc. acut. 1,2 cm lg. lateralib. vulgo acumin. Pet. oblique lin.-ligul. acut. c. 1,1 cm lg. Lab. 3lobo quam sep. paulo breviore, profundius saccato, medio callo quadrato retuso ornato, dimidio anteriore puberulo, ciliato, lob. lateralib. semiorbicularib. obtus. intermedio paulo longiore ovato, antice breviter acuminato,

apice ipso paulū incrassato. Col. brevi, crassiuscula, pede apice triangulari excavato, anthera rotundata, cucull. antice obtuse apiculata, glabra, pollin. subfalcato ellipsoideis, stipite abbreviato, quadrato, glandula breviter lunata. - Fl. Julio.
Borneo. Auf Bäumen b. Samarinda, Staat Koetei (Schl. n. 13334)
Hat einen tieferen Sack als d. andren Arten. Blt. wohlriechend u. braun gefleckten Labellum.

Trichoglottis tenera Schl. = Cleisostoma tenerum Hook. f. in Fl. Brit. Ind. VI, 73.

Sarcolabium angraecoides Schl. (Typ. herb. Schl.) 472
Epiphyticū, erectū, brevicaule, simplex, 6-10 cm altū. Caule brevi terete glabro, dense foliato, omnino vagin. foliorū amplectentib. obtecto. Fol. oblique ligulat. obtusiuscul. v. acut. apice inaequaliter bilob. coriac. 4½-7 cm lg. medio 8-13 m̄ lt. pedunculis lateralib. erectis quā fol. duplo brevioril. tertiuscu. ~~...~~ racemo sublaxe plurifloro, bract. triang. acut. v. acumin. ovario trigono 6 m̄ longo multo breviorib. Florib. erect. inter majores generis. Sep. elliptico-obl. apiculat. 9 m̄ lg. lateralib. paulū obliqu. petal. sepalis similib. obtusiuscul. 8 m̄ lg. Lab. late cuneato-3lobo, lob. quadrato-oblongis, antice serrulat. dente triangulo obtuso parvulo interjecto, 5 m̄ lgis, calcari cylindrac. obt. medio paulū constricto c. 1 cm lgo. Col. brevi crassa, marginib. medio ampliat. incurv. rostello ascendente bifido, anthera cucull. rhomboidea, antice vix producta, pollin. globos. stipite gracili, glandulā parvulā versus angustato, pollin. bene longiore. -
Borneo. In d. Wäldern am Long Sele, Staat Koetei (Schl. 13468)
Hat habituelle Ähnlichkeit mit einigen afrikan. Angraecum Arten, steht am besten neben S. Angraecū Ridl. Blüten hellgelb Labell. weiss m. roten Flecken.

Sarcolabium sphaerophorum Schl. - (Typ. herb. Schl.) Epiphyticū, erectū, brevicaule c. 25 cm altū. Caule brevi tereticeuculo vagin-foliorū omnino obtecto, Fol. lorat. apice inaequaliter et obtuse bilob. coriace. 12-15 cm lg. medio c. 1.8-2 cm lt. basin versus vix angustat. Inflorescent. gracilib. folia paulo excedentib. vulgo simplicibus, peduncl. terete, vaginul. pauc. dissit. obsesso, racemo sat dense cofloro. c. 5 cm lgo, bract. minut. ovaria subsessili cylindraceo, 4 mm lgo brevioribus. Floribus inter minores generis. Sep. obl. - subspathulat. obtus. c. 5 mm lgis, lateralib. paulū obliqu. Pet. oblique obl. obt. sepalis paulo minorib. Lab. 3lobo, saccato, 4 mm lgo, lob. lateral. erect. rhombeo-quadrat. parvul., intermedio ovato obtusiusculo, lobis lateraler majore, saccato, subgloboso ~~[illegible]~~ c. 0.5 cm diam. intus laevi. Col. brevi, crassa, rostello triangulo, antice bifido. — Fl. Julio.

Borneo. Bei Samarinda, im Staate Koetei (Schl. n. 13333)

Nach Hooker f. & Ridley Cleisostoma, nach Schl. Sarcolabium.

Listera Savatieri Maxim. ined. ex Komar. Fl. Mansch. I (1901) 526. Makino in Tokyo Bot. Mag. ~~XX~~ XIX (1906) 7 (VII . 69 d) non Cham. List. Eschscholtziana Maxim. Prim. fl. Amur. Makino Tok. B. M. List. japonica Franch. et Sav. Enum. II. 37 (non Bl.) fide Komarov.
Whole plant 11-24 cm high. Rhizome filiform, long-creeping, subterranean, root-like, usually furnished with 1 or few new plants in distance, ~~roots~~ loosely pauci-plurifascicl. at nodes near the stem filiform often with root-hairs. Stem erect or ascending, slender 1-6½ cm lg. glabrous below the leaves, but 7½-20½ cm lg. including the raceme & pubescent with spreading glandular hairs above the

leaves with 2 thinly membranaceous appressed sheaths at the base leaves 2 opposite, approximate the superior 1 usually somewhat smaller, patent, situated in the lower portion of the stem, elliptico-ovate to orbiculate ovate or subdeltoid-ovate obtuse or acutish at the apex, broadly truncate & sometimes very shallowly subcordate below, triangularly & very slightly produced at the sessile base, membranous, glabrous green often albescent along the main nerves, paler beneath 12-38 m lg. 11-29 m br. main nerves 3, leaflets 4-9 or sometimes 12 on the stem between the leaves & the raceme, thin, subulate, 1½-5 m lg. Raceme erect loosely 6-21-flowered. rhachis filiform, straight or subflexuous above,




2½-10 m lg. bracts appressed & apparently shorter than the pedicels 1-3 m lg. Flow. mostly viridescent with no trace of purple, pedic. puberulent or glabrous 2-5 m lg. Perianth erect or recurvo-patent equal in length thinly membranous. reflexed on margin 2-2½ m lg. Sep. the super. one oblg-lanc. fig. 3) obtuse or acutish obtuse, the later. fig. 4) similar, slightly oblique. Pet. linear (fig. 5) lin. very obtuse. Lab. (fig. 6-7) 2-2½ × the length of the perianth narrowly obovate-cuneate, gradually attenuated below & without basal teeth, obcordate with oval or ovate lobes & closed sinus above rarely obcordate cuneate (fig. 8) with an open sinus & divergent oval lobes often with a minute deltoid or rounded projection in its bottom 5-6½ m lg 2-4 m wide in the upper broad portion, median nerve thicker Col. 1½-2 m lg. straight clinand. deeply concave, obscurely crenulate anther ellipt.-ovate, rostell. broadly deltoid ovate. stigma rounded. Ovary oblg or obconico oblg. glabrous 2-2½ m lg.
Prov. Tosa, Hitachi, Shimotsuke. Ito. Iwashima.

<u>Listera Yatabei</u> Makino in Tokyo Bot. Mag. <u>XIX</u> (1905) 8. —
Whole plant 16–19 cm high. Rhizom creeping filiform, roots filif. Stem erect slender glabrous below the leaves, puberulent above with patent short glandular hairs including the rhachis of the raceme. Leaves 2 placed in the middle of the pl. oppositely approximate orbicular-subreniform obtuse or acutish at the apex broadly truncate-subcordate, entire or more or less crispulate membranaceous glabrous 18–25 mm lg 25–30 mm br. 7-nerved, the outer nerve with an extern. branch. Reduced leaves (about 2) loosely disposed on the stem, subulate, squamiform, glabrous ab. 2½ mm lg. Raceme erect loosely about 11-flowered, ab. 4–5 cm lg. rhachis filif. bracts erect-patent, apparently shorter than the pedicels ovate subulate, or late ovate, membranaceous 1½–2 mm lg. Flow. small luteo-viridescent? pedicels gracile puberulent ab. 3½–4 mm lg. Perianth equal in length obtuse membranaceous ab. 2½ mm lg. The super. sep. ovate-lanceolate (fig. 1) the later. ones somewhat oblique lanceol-oblg. Pet. linear (fig. 3) Lab. (fig. 4) twice as (fig. 2) lg as the perianth, late linear below with 2 divergent short-oblg. obtuse & slightly oblique lobes above, with a minute point in the bottom of the open sinus, the median vein thick, basal teeth very minute & obsolete. Col. about 2 mm lg. anther late ovate obtuse & very shortly bifid at the apex. Rostell. [illegible] roundish. Ovary oblg. glabr. ab. 2 mm lg.




Japan. Prov. Shinano, Mt. Ondake. Prov. Shimotsuke.
Resembles <u>L. puberula</u> Maxim. Differs by the leaves & sep. & the length of the labell. Also near to <u>L. Savatieri</u> Maxim differs by form & position of leaves & labellum.

<u>Listera nipponica</u> Makino in Tokyo Bot. Mag. XIX (1905) 9. – Whole pl. 11-22 cm high. Rhiz. short ascending or erect, roots filif. Stem erect, glabrous below the leaves, above them puberulent with patent glandular hairs including the rhachis of the raceme. Leaves 2 oppositely approximate, in the middle of the pl. sessile, patent, ovate reniform orbiculate, abruptly cuspidate at the apex, broadly truncate or subcordate & in centre very slightly produced at the base, minutely crispulate on the entire margin, glabrous, membranaceous, 13-25 mm lg. 10-31 mm br. main nerves 3, reduced leaves none or 1 squamiform ovate-subulate. Raceme erect loosely 3-9 flowered 3-5½ cm lg. rhachis gracile, often subflexuous, bracts (fig. 1) small shorter than the pedicels, membran. glabrous, 1½-5 mm lg. Flor. small olivaceous purpurescent; pedicels glabrous or subpuberulent 3-8 mm lg. Perianth equal in length obtuse membranaceous, 3-4 mm lg. Sep. reflexed, the superior one (fig. 2) oblg-lanceol.; lateral (fig. 3) similar but hardly oblique. Pet. (fig. 4) oblg. slightly broader. Lab. (fig. 5) twice as lg as the perianth, flabellate-obcordate with ovate-oval or elliptical rounded often subcrenulate divergent lobes with a minute depressed point in the open sinus, broadly cuneate below & shortly attenuated at the base, on each side at the base furnished with a small (1½ mm lg.) obovate elliptical or subspathulate oblg. tooth; lip entire 5-6½ mm lg. 4½-6 mm br. flabellately veined median nerves thicker. Col. 2-2½ mm lg. clinandr. deeply concave, dorsal edge paucicrenulate, anther late ovate obtuse, rostell. broad. stigma reversed. Ovary obovoid glabr. 2-3 mm lg.




<u>Japan</u>. Prov. Shimousa. Prov. Shinano. Prov. Kai. Prov. Iwashiro.
Mehr od. weniger verwandt mit L. puberula Max. pinetorum Ld. & am nächsten mit L. convallarioides Nutt.

<u>*Listera shikokiana*</u> Makino in Bot. Mag. Tokyo VII (1893) 63 & XIX (1905) 11. – Whole pl. 5–17 cm high flaccid. Rhiz. filif. ascending short or rather lg. roots lg. filif. Stem erect purplish, subsucculent & glabrous below the leaves but above them minutely glandulous-pubescent including the rhachis, with 2 or 3 sheaths, the upper sub-foliaceous 10–17 mm lg. Leaves 2 oppositely approximate, situated usually above the middle of the pl. sessile ovate-deltoid subcuspidate-acute or sharply acute at the apex, broadly truncate & sometimes subcordate below, abruptly & very shortly produced at the base, membranaceous, glaber, sometimes alternating along the midrib & on the upper surface. 12–21 mm lg. / 10 mm br. 3-nerved. ~~with~~ Raceme erect loosely 2–5-flowered, rhachis 10–32 mm lg. bracts (fig 1) small much shorter than pedicels broadly ovate. obtuse or acute embracing the base of the pedic. thinly membranaceous 1-nerv. Flow. olivaceo-purpurasc. pedicels glabrous or very thinly pubescent, 3½–8 mm lg. Perianth ~~reflexed~~ thin 2½–3 mm lg. Sep. obtuse, the superior one (fig 2) ovate oblg. laterals (fig 3) oblique & oblg. or oblg-lanceolate. Pet. (fig. 5) about as lg. as the sep. spathulate-oblg. or linear oblg. quite obtuse revolute on margin. Lab. (fig. 5b) about 2½–3× lger as the perianth 5½–8½ mm lg. cuneate sagittate with a tooth on each side of the very base divergently bifid above, with a minute deltoid obtuse point in the sinus narrowly & longitudinally elevated in the centre, lobes narrow & lato-linear, acute or obtuse & often paucidentate at the apex, straight, delicately 3–6-nerved, 3–5 mm lg. 1–1½ mm br. basal teeth oblg. or oblg lanceolate, obtuse or acutish arcuate turned upwards & clasping the col.



Col. very short, globose, clinandr. large deeply concave, anther broadly ovate obtuse, sessile on the posterior side of the clinandr. rostell. short, very slightly retuse, stigma horizontal concave. Fl. April, May.
Japan Prov. Tosa Pr. Ugen. Pr. Yamayo
It has more or less an affinity to L. cordata R.Br.

Platanthera Okuboi Makino in Tokyo Bot. Mag. XIX (1905) 25.—
20-45 cm high. Tub. elongately fusiform perpendicular. Stem erect stout straight, with 2-3 sheathing cataphylls. Leav. 5-8, the lower 2 larger & equal or nearly so in size & form 10-20 cm lg. 3-5 cm br. approximate, erect-patent. elliptical to narrowly oblg. obtuse at the base, obtusely to narrowly attenuated & amplicaul at the base, 7-8-nerved on each side; upper leav. laxly disposed, adpressed narrowly lanceol. attenuated above with an obtuse point, semiamplexic. 2-6 cm lg. the lowest one attaining sometimes 12 cm lg. Raceme rather densely manyflowered, 5-10 cm lg. 3-4 cm wide, rhachis straight. bracts foliaceous, lanceol. to ovate-lanceol. acuminate with obtuse point, equal or slightly longer than the ovaries, membranous. 3-several nerved, 2½ cm attaining. Flow. viridescent-white. Sep. membran. the upper ovate or subdeltoid-ovate, obtuse 6-8 mm lg. 4-6 mm wide, later. ones patent-reflexed, slightly oblique in shape, ovate-lanceol. or oblg. lanc. obtuse, longer than the upper one sep. thick, 8-10½ mm lg. Pet. erect, slightly lower than the upper sep. thickish subfalcate ovate-(linear or oblg.-) obtuse, 3-nerved, about 6-6½ mm lg. Lab. lanceol.-ligulate, obtuse, canaliculate sub 5-nerved about 10 mm lg. 3-3½ mm wide, spur longer than the ovary, elongate narrow, falcate towards the apex, 2½-3 cm lg. Col. short, broad, emarginate, bifid at the top anther cells remote obovoid-oblg. rostell. broadly obtuse, column-auricles ellipsoid, ovary angulate, arcuate, gradually attenuated above, ab. 1½ cm lg. — In Ins. Hachijo (New Ford!)

soll nach Makino Pl. orbiculata Hook. nahe stehen, an die sie aber wohl hauptsächlich durch d. Habitus bez. die 2 grossen unteren Bl. erinnert, im übrigen ist sie schwerlich etwas anderes als eine luxuriante Form von Pl. japonica Ldl., mit der sie Max. auch im einzelnen vergleicht. Ebenso erinnert sie etwas an Pl. chlorantha Cust. Sie gehört natürlich zur Gruppe „Bifoliae."

Stigmatodactylus Maxim. in litt. (1890) Makino in Tokyo. Bot. Mag. XIX (1905) 68.

Perianth free, patent. Sep. subequal, the later. ones subfalcate, Pet. similar. Lab. sessile to the very base of the col. undivided, flat, membranaceous, the face naked, but the base with a subcarnose 2-parted appendage partly connected to the base of column. Col. erect, rather long, incurved above, semiterete narrowly 2 alate above with a process in the middle in front; clinandrium concave continued to the alae of col., anther 2 celled cells contiguous, valves strongly adnate to the connective. pollinia 4 in 2 pairs, sessile, compressed; stigma under the short rostellum, broad, concave, furnished with a capitate ligul. long appendage on the lower edge. Caps. erect-patent, narrowly oblg.

Small terrestr. herb, 1-foliate, racemosely 1-3-flowered; rhizome elongate, with a small tuber at the end. Stem simple erect glabrous, leaf in the middle of stem, sessile evaginate, ovate acuminate. Flow. erect not reverse, very shortly pedicellate, bracts foliac.

St. sikokianus Maxim. in litt. 1890. Makino Ill. Fl. Jap. I (1891) n. 7 t. 43, in Tokyo Bot. Mag. XIII (1899) 9; ibid. XIX (1905) 69; Franch. et Savat. Jap. Icon. I t. 39; Matsum. Ind. Pl. Jap. II, I p. 263. — Perennial 3-10 cm high, glabrous. Rhizom hypogeous, often curved somewhat thicker above, pale, covered with red hairs, provided with 2

minute colourless scales above, at each axil of scales with a short pale & slightly fleshy branch; the tuber small, simple globose to ellipsoid, attaining about 3 m̄ across. Stem slender, angulate pale green furnished with the single leaf above the middle & a minute scale at the base. Leaves small semiamplexicaul, ovate acuminate entire & more or less crispate on margin green, the midrib inconspicuous, lateral veins 1 on each side those of sterile stem few petiolate vaginate at the base, orbicular ~~acute~~. Raceme short, terminal, loose flowered, rachis flexuose, angulate, bracts patent, sessile & semiamplexicaul, similar to leaves in form but slightly smaller. Flower large in proportion. Perianth subequal linear, acuminate entire, membranaceous, somewhat incurved. Sep. bearded with long & few hairs on both basal margins, more or less narrowly inflexed on margin, light green, but the superior one also shaded with purple in the lower half, the superior one 4 m̄ lg., later. ones longer 2½ m̄ lg. hidden under the labell. when flower expanded. Pet. not bearded on the basal margin, light green & shaded with purple below 3½ m̄ lg. Lab. ample, patent, orbicular, scarcely shorter ~~than~~ attenuated below, entire but minutely crenulated on the front margin, 4 m̄ across, very light purple, but deep purple vertically in centre, appendage directed to the front, much shorter than the labell. & 1½ m̄ lg. cut down to the midway into 2 lobes of the upper & lower, purple, lobes shortly bifid at the apex, the upper one a littler shorter. Col. 3½ m̄ lg. appendage minute & emarginate; clinandrium with an obtuse short rostellum in the front sinus; anther valves minutely tuberculate on the surface. Pollinia minute elliptical, light purple brown, Ovary fusiform, triangular with an elevated ridge on each surface, Caps. linear oblg. Fl. Aug. Septemb. — Japan Prov. Tosa.

Saccolabium Toramanum Makino in Tokyo Bot. Mag. XIX (1905) 141. Gastrochilus toramanus Hatt. in Prodr. Fl. Sin. Jap. (1919) 289. — A little epiph. orch. attaining about 7cm lg. glabrous. Rhiz. usually simple, creeping, filiform, radicant with loose fibers enclosed with short sheaths of leaves throughout. Leav. small ensiform, distichous, spreading many subclosely arranged, elliptical to oblg. or ovate-elliptic. acuto-cuspidate or acuminate, acute or sometimes obtuse at the base, very shortly petiolate, articulated, coriaceous, channelled, green & purple-maculate, 3-nerved, 5-11 m lg, 2½-5 m br. persistent. Raceme shorter than the leaves, approximately 2-6-flowered, peduncled; rhachis shorter than the peduncle, often flexuous, angulate 1-2½ m lg. Flower minute. Perianth petalous, free, concave, membranaceous, thick in centre & carinate, yellowish-viridescent, blotched with purple. Sep. subobovate-oblg or elliptical, obtuse, subequal 2½ m lg. Pet. slightly shorter than the sep. subobovate elliptic. ab. 2m lg. Lab. sometimes shorter than the perianth, slightly adhering with the base of the col. 4 m lg including the calcar, 3lobed, limb 2 m lg. midlobe ample, emarginato-reniform, rounded on both sides, 2vertically carinate in dorso, membranaceous. 1½ m lg. 3 m br. later. lobes much smaller, erect entire subovate, duplicate to the basal part of the midlobe of the apex (nur unverständlich), dors. thick, ovato-delloid, pubescent or nearly so (33), calcar straight, parallel to the ovary cylindrical, obtuse, equal to the limb & nearly equal to the ~~ovary~~ perianth, smooth, naked internally. Col. short stout, dorsoventrally compressed, clinandr. obliquely truncate, subdeltoid, rostellū distinctly projected, bifid, anther broadly produced in front, 2lobed. Poll. 2, caudicle lato-lin. subulate, retinaculū sagittate.

Japan. Prov. Tosa, Mt. Yanase – K. Gobobi.
Rare species, nearly allied to S. Matsuran Makino, which differs in the form of leaves & lab.

Platanthera Makinoi Yabe in Bot. Mag. Tokyo XVII (1903) 19.
Caulis 30cm. altus, foliosus, crassus basi 5-7mm diam. Fol. basil. obl. v. elliptica 5-6cm lga, 2-2½cm. lt. obtusa, amplexicaulia, superiora mediaque ovato-oblga v. elliptica 7cm lga, 2cm lt. ± acuta, vaginantia, summa in bracteas transeuntia. Spica c. 7cm longa, densa, basin versus ± laxa. bract. flores aequantib. v. superantib. ovato-lanceol. Sep. dors. late ovat. v. oblg. obt. 4-5mm lg. 3mm lt. lateralia suboblique ovata obtusa 5mm lga 2½mm lta, 6-nervia. Pet. falcata ovata ~~obtusa~~ v. anguste triangularia, 2mm lata, acuta; Lab. obl. ovatum, sensim dilatatum, obtusum, 5mm lg. sep. pet. q. aequans; Calcar labello aequilongum leviter incurvum, 1½mm latum. Perigon. flavo-viride v. album. Gynost. breve dimidium sep. dorsalis vix aequans. loculis antherae infra divergentib. rostelli lobus obtusus late triangulus.
Habitu P. hyperboreae Lindl. similis differt fol. late obl. nec lanceolato-oblgis. florib. robustiorib. sep. pet. q. latiorib. lab. obl.-ovato apice versus sensim angustato nec leviter dilatato deinde angusto ut in P. hyperborea.

Taeniophyllum aphyllum Makino Figur. et Descr. Jap. illus. I t. 11 (1890) Synon. cf. Schlechter. Prodr. 297. – A small aphyll. epiphyt. orch. 7cm across. Roots many about 25, somewhat compressed simple sinuate flexuose, often hairy on the under side, pale green. Stem erect, ab. 4mm lg. with minute pale brown subulate scales at the top. Scapes 1 to several 4-8mm lg. capillary glabr. 1-3-flowered.

rhachis short flexuous. bracts deltoid-subulate 1/2-1 mm lg. Flow. 1 mm lg. greenish. Perianth thickish, connate below not patent; segments subulate-lanceolate or ovato-deltoid all 1-nerved, the outer segments acutish, the inner slightly shorter. Lab. included, slightly concave subtrilobed, free from the perianth, the later. lobes small semiorbicular, inflexed, the midlobe much larger, subulato deltoid or subul-lanceolate, furnished with a refracted filifor appendage, nearly equal to the midlobe itself in length. Calcar short serrate, rounded. Gynostem. very short, connected to the calcar & labell. in front. Anther 2celled with a groove ~~in front~~ externally, the front portion parted in 2 rounded lobes pollinia 4 in 2 pairs, clavate, sessile on the gland. Ovary cylindrico-subobovate or -oblong, glabrous, very shortly pedicellate. Capt. oblg. usually somewhat curved, 3 1/2-5 mm lg. dehiscing on one side.—Fl. June.

Japan. Prov. Tosa. Prov. Awa. Prov Musashi.
Allied to Taeniophyllum Alwisii Lindl. of Ceylon

Gymnadenia Keiskei Maxim. var. Kinoshitai Makino in Tokyo Bot. Mag. XVII (1903) 112.—About 10 cm high. Tuber solitary, perpendicular oblg. cylindr. 13-14 mm ~~thick~~ lg. Stem slender, monophyllous below & few-vaginate at the base. Leaves broadly linear, acutish, concave above, somewhat thickish 3-nerved. 4 1/2-5 1/2 cm lg. 5-7 1/2 mm br. Raceme short secund, 1-3-flowered, rhachis 7 mm lg. bracts shorter than the ovary subulate, 2 1/2-9 mm lg. Flow. 5-7 mm across, white & shaded with very light violet, inodorous. Outer perianth erect-patent, concave 3-nerved, the upper one elliptic-ovate, obtuse ab. 3 mm lg or more. lateral obliquely-ovate, obtuse, slightly longer than the upper. Inner perianth connivent, scarcely

shorter or equal to the outer upper one. somewhat oblique & deeper in colour. 1-nerved. Lab. 8-10 m lg. 8-9 m wide. sessile, 3 parted, broadly cuneate at the base with 2 short purple lines at the base above the later. Lobes erect-patent ligulate oblong obtuse, the middle a little longer than the later. ones ligulate truncate or rounded & slightly bifid at the end. Calcar small about 2 m lg. horizontal, clavate-oblg. rounded at the end, scarcely curved. Anther erect, closely placed, purpurascent. Ovary pedicellate, cylindr. curved in the apical portion, 8-13 m lg. incl. the pedicel. Bulbiferous at the top of the raceme in autumn after anthesis. Fl. June.

Japan. Prov. Musashi Prov. Ugo.

Differs from the type by the form of the labellum, narrower leaves, colour of the flower & the bulbiferous habit.

Platanthera Takedai Makino in Tokyo Bot. Mag. XVII (1903) 120.
17-22 cm high. Tuber perpendicular, radiciform, thicker towards the base, roots few. Stem angulate, with 2 membranac. cataphylls. Leav. 2 remote, the lower one normal, in the middle of the whole pl. ovate-oblg. obtuse, amplexicaul, not sheathing at the base, 3½-7 cm lg. 1⅓-2 cm br. or more with 3 main nerves, the upper one bract-like, ovate-linear to lin.-lanc. acuminate, sessile. Raceme 3-6 cm lg. loosely 8-10-flowered, rhachis angulate, bracts subulate-linear, the inferior longer than the flowers, the superior shorter. Flow. viridescent, inodorous, about 9 m in vertical diameter. Upper sep. erect lato ovate obtuse 4 m lg. 3 m br. 1-2-nerved, laterals turned downwards, lato-linear obtuse longer than the upper one. Pet. erect. nearly as lg as the outer sep. dors. obliquely narrow (5 m lg.) deltoid-ovate acute, pale viridescent, 1-nerved. Lab. simple, pendulous slightly longer than the later. sep. deltoid linear, gradually attenuated above, obtuse, thickish. green 6 m lg. Spur broad labor very

short, shortly conical green, 1 mm lg. Gynost. broad deeply emarginate at the apex, anther cells obliquely & distantly placed pale, gland small, discoid, yellow, pollin. clavate stipitate rostellum very short, broad. Ovary cylindr. oblg. 6 mm lg. – July. Japan. Shimosuwa

Closely allied to Pl. ophrydioides Fr. Schmidt but the calcar is different; or a variety of it?

Cypripedium guttatum Swartz. var. Yatabeanum (Makino) Pfitz. in Engl. Pfl. fam. IV. 50 (1903) 33. – Cypripedium Makino in Tokyo Bot. Mag. XVII (1903) 192. – Yatabeanum Mak. in Tokyo. Bot. Mag. XIII (1899) 91. – Lower sep. viridescent, shaded with a light purpurescent-brown towards the ~~apex~~ margin, the upper sep. pale yellowish & purpurescent brown on the margin externally, yellow purp.-brown internally. Pet. whitish blotched with purpuresc.-brown colour, villose with pale hairs at the base internally. Lab. yellow, maculate-colours with purpurasc brown, yellow at the inflexed margin villose with white hairs at the base internally. Staminode white, but yellow towards the base with a row of yellowish green spots along the upper margin. Gynost. pale yellowish Ovary viridescent, glandulose-pubescent with white hairs. Bract green. Leav. green but nigrescent when dried, stem & peduncle viridescent. – Fl. June.

Prov. Shimano. – Beschreibung nach lebendem Material.

Cymbidium Kanran Makino in Tokyo Bot. Mag. XVI (1902) 10. – Terrestrial
Pseudobulb ovoid, 17 mm across; subterranean or nearly so, scales several, sub-
late, acumin. membranous, carinate, imbricately & closely equitant, the
largest c 10cm in length, roots fibrous, thick spongy. Leav. tufted 3 or 4 on a
bulb, recurved, linear or broadly lin. acuminate, canaliculate, carinate
towards the base, coriaceo-chartaceous, entire but serrulate-scabrous
above, shining above, nearly concolorous beneath. Scape later. erect from
the base, 25–60 cm high inclad. the raceme green, often purplish, sheaths
membranous, narrowly lanceol. acumin. gradually decreasing in size below,
remotely above, imbricated in the basal ones. Raceme more or less
secundly & loosely 5–12-flow., rachis short, slender, terete. bracts linear,
acumin. shorter than the ovary, 8–28 mm lg. Flow. 5–6 cm across, very fra-
grant. Perianth viridescent, purple in centre in the petals, outer perianth
petaloous, broadly lin. very acumin. superior sep.) 3–4 cm lg. 3½–4½ mm
broad, lateral a little shorter, hardly oblique in ~~front~~ form. Pet. erect patent
shorter than the outer, lanceol.-lin.: acumin. 2 – nearly 3 cm lg. 4½–5½ mm br.
Lab. a little shorter than the pet. horizontal, sessile with the obtuse or
rounded base, glabr. hardly 3lobed, with 2 narrow glabr. lamellae between
the side lobes forming a deep longitudin. channel, 16–25 mm lg. Lateral lob. short,
rounded or subacute at the apex, whitish, purple coloured, middle much
larger ovate or obl. ovate, obtuse with an acutish tip, entire reflexed, thinner
many-nerved, light green spotted with purple, 10–16 mm lg. 6–10 mm br. Gynostem.
arcuate, biconvex, compressed light green, spotted with purple 10–14 mm lg.
2–2½ mm wide, clinand. obliquely truncate, dorsal edge deltoid, pollin. 4
sessile, ovate, much compressed, gland lunate, ovary cylindric, glabrous.
Prov: Musashi: Tokyo, Bot. Gard. Koishikawa.
Allied of Cymb. ensifolium Sw. & xiphiifolium Ldl. – Lieblingsblume
der Japaner, as the noblest & most valuable pl. for the fragrance of its flow.
Kanran bedeutet „Winter Orchis" Es gibt ausserdem eine forma purpu-
rascens. Sie blüht zu Anfang des Winters.

<u>Cymbidium albo-rubens</u> Makino in Tokyo Bot. Mag. XVI (1902) 11. —
Terrestrial. Ps. bulb horn-shaped or ovato-fusiform, attaining about 2 cm across, enclosed by the bases of the leav. scales firmly membran. subulate-lanceolate, acute, the largest 18 cm lg. lastly splitting into fibres; roots numerous, branched 2½-4½ mm across. Leav. densely tufted, recurved, 4-8 to a pseudobulb, elongate, linear, acumin. very gradually attenuated below, canaliculate entire with quite smooth margins, deeply green & shining above, paler beneath, thinly coriaceous 2-10 dcm lg 1-2 cm wide, main nerves 2-4 on each side. Scape cernuous from the base, terete, smooth, enclosing with sheaths 4-5½ mm across: sheaths ample, inflated, herbac. thinly membran. obl.-lanceol. tubular below, acute, purpurasc. greenish above, about 14 cm lg, gradually shorter, imbricated. Raceme cernuous longer than the ped. lastly 4-12-flow. rhach. subangulate, flaccid, green, slightly purpur. 5-25 cm lg. bracts small deltoid sharply pointed 3-8 mm lg. Flow. scentless. Perianth thinly membranous, white with a rubescent stripe in centre, with finely crispate margin. Sep. patent, narrowly oblanceolate equal in length & size acute, apiculate dorsal erect, lateral obliquely downward, 2⅔-3½ cm lg, 7½-9½ mm br. Pet. shorter, narrow-lanc. obtuse, with a minutely apiculate tip 2-2⅔ cm lg. 6-7½ mm br. Lab. horizontal, shorter than the pet. sessile with an obtuse rounded base, thinnish, 3 lobed, with 2 pubescent white & nearly closed placed lamellae betw. the side-lobes, yellow at the base, side lobes erect, ovate, obtuse, entire, scarcely ciliated on the inner margin, purplish red, the midlobe larger than the side lobes, yellow at the base much recurved, broadly ovate, with minute tip, purpurasc. red, yellowish in centre. Gynost. equalling the side lobes of the labellum in height, deeply purpur. red. 1½ cm lg. 4½ mm wide, clinandr. deltoid, obliquely truncate; poll. deeply tripart. fiss. ligulato-reniform. Ovary cylind. usually slightly longer than the pedicel 3½-4½ cm lg. Caps. obl. fusiform, beaked at the top, about 2½ cm across.

Prov. Musashi: Tokyo. Bot. Gard. Koishikawa, cult. (T. Makino)
Also found in Formosa. Flowers in winter in Tokyo.

<u>Saccolabium Matsuranum</u> Makino. Notes on Jap. Pl. XV (~~1892~~) in Tokyo Bot. Mag. VI (1892) 48 et in Tokyo Bot. Mag. XVI (1902) 12. — Small epiphyte. Stem simple, rarely branched, about 1–4 cm lg., horizontal or more or less pendulous, enclosed with short sheaths of leav. Numerous roots slender greenish white. Leav. distichous, approximate, patulous or erect patent, obl.-lanc. or obl. lin. entire, obtuse, acute at base, very shortly petiolulated, coriaceous, carnose, shining, green, spotted with dark purple, 3-nerved, 7–20 mm lg., 2–5 mm br. Peduncle extra-axillary, shorter than the leaves, stout, filiform, terete, slightly enlarged above, glabrous, 4–8 mm lg., scales minute remote, subulate. Raceme short, much shorter than the peduncle, flexuous 1–3-flowered, bracts minute, deltoid subulate, acute, persistent. Flor. small, about 6–9 mm across. Perianth patulous, obtuse, entire, thickish, glabrous, yellowish-viridescent, blotched with purple. Sep. nearly equal in length, the superior ellipt.-obl. the lateral narrowly obl. Pet. very slightly smaller & scarcely shorter than the ~~other~~ sep. narrowly obl. Lab. horizontal, equalling the sep. adhering with the gynost. at base, spur relatively large, shortly obconical, obtuse, broadly opened, thinly walled, glabrous, having a longitudinal ridge in front wall internally; limb reniform with entire ~~&~~ rounded side-margins, obtuse or truncate at the apex thick & 3-nerved in centre, thin towards the margins. Gynost. very short, stout, obtusely toothed laterally, clinandr. obliquely truncate deltoid, rostellum 2fid, anther shortly produced in front, truncato-rounded at top, poll. 2 globular, caudicle filiform or lin.-filiform much longer than the poll. gland obl. 2fid at one end. Caps. obovoid-obl. obtusely trigonous, pedicellate, spotted with purple.

Prov. Tosa: Mt. Yokogura. – Prov. Idzu: Mt. Amagi. Rev. Teraishi.

This is probably the most inconspicuous & most northern species among the genus. It has the habit of Sarcochilus japonicus Miq. – Ist [illegible] Sarcochilus, nach Schlechter in [illegible]

<u>Platanthera nipponica</u> Makino in Tokyo Bot. Mag. XVI (1902) 153.
[Bifoliae, Monophyllae] Tuber 2 radiciform, oblg. fusiform at the base. Stem 25-44 cm high, angled. the raceme very slender, with 2 cataphylls at the base. Leaves 3-8, the lowest one largest & normal being broadly linear, acute, evaginate or very shortly vagin. at the base, the most 4-7 cm lg. 5-7½ mm br. the superior much smaller, bract like, lin. acumin. erect. Distant. 6-28 mm lg. Raceme erect laxly 4-6-flower. 3-6½ cm lg. rather slender, bracts subulato lanceol. acumin. half the length of the ovary. Flow. viridescent, about 4-7 mm across. Sep. oblt. membranous. 1 or 3 nerved. the dorsal erect ovate, lateral deflexed very slightly longer than the dorsal obl. somewhat oblique. Pet. erect galeate with the dorsal & equal to him in length, narrowl. obl.-lanceol. or ovate-obl. very obtuse 2 nerved. Lab. a little longer than the perianth, simple, carnose, obl.-ligulate or narrowly obl. slightly attenuated below, obtuse, 3-4½ mm lg. Calcar slender transversely turned backwards & curved upwards 1½-1⅓ as lg. as the ovary, obtuse, slightly & gradually incrassate towards the apex. 7-14 mm lg. Ovary cylindric. curved 5-9 mm lg.- June, July.
Prov. Rikuchū, Mt Kurikoma (Makino), Pr. Etchu, Mt. Tate-yama.
Pr. Iyo: Takatera, near Matsu-yama. Pr. Bitchu: Mt. Mame-yama.
This species comes nearest to Pl. tipuloides Ld., or its variety?

<u>Cymbidium scabroserrulatum</u> Makino in Tok. Bot. Mag. XVI (1902) 154.—
Terrestrial caespit. Roots yellowish pale. Ps. bulbs not large, erect or ascending, ovate to clavate-obovate, aggregated, ± 5/4 cm across. internodes short with splitting fibres. Leav. elongate, fasciculate, gradually attenuated towards both ends, shortly acumin. serrulato-scabrous on margin, coriaceous, membranous. margined at the base 28-57 cm lg. 7-13 mm br. Scape shorter than the leav. invested. the raceme, erect, with membranous. acumin. sheaths. the longest 5 cm lg. Raceme shorter than the scape, laxly 5-10 flowered. rather straight or subflexuous, with

are often more or less purplish 10-15 cm lg. bracts slightly shorter than the ovary narrowly lanc. acumin. 7-21 mm lg. Flow. about 3½-5 cm across, slightly odoriferous. Perianth yellowish-viridescent, often shaded with light purple externally, thinnish, entire. Sep. patent or at length more or less deflexed backwards, linear-lanc. sharply acute 2½-3½ cm lg. 4½-6 mm br. the lateral scarcely oblique. Pet. directed forwards, shorter than the sep. narrowly lanc. acute 2-2⅔ cm lg 5½-7 mm br. longitud. [illegible] in centre, purple below. Lab. rounded at the base & yellow 2¼-2¾ cm lg. obscurely 3-lobed, later. lob. erect rounded & entire edged, white, purple margined & purple barred in the intramarginal portion, the disc white there with many & minute purple spots within the central canal, the ridges closely approximate, raised in front & obtuse at its end. midlobe much reflexed ovate-lanc. longer than the disc acutish or subobtuse crisped-margined thinnish, viridescent papilloso-pubescent & irregularly blotched with purple 15-17 mm lg 7-8 mm br. Gynost. erect, arcuate, compressed 12-14 mm lg. 4-5 mm wide yellow above & whitish below, purple spotted at the front surface clinandrium obliquely truncate subdeltoid with the obtuse or shortly produced dorsal edge. pollin. 4 deltoid orbicular, the inner ones smaller, gland lunate, ovary narrowly cylindrical shorter than the sep. 10-25 mm lg. including the short pedicel. Fl. April.

Tokyo. cult. Native of China, it was recently introduced & cultivated at Tokyo. The leav. very closely resemble those of Cymb. virescens Lindl. — Soll nach Schlechter, Prodr. 266 = C. Faberi Rolfe sein, was mir sehr fraglich vorkommt.

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# Zwei neue und eine kritische Orchidacee.

Von

**Fr. Kränzlin.**

**Vanilla odorata** Presl Reliqu. Haenk. (1830) 101; Klotzsch in Bot. Ztg. IV 563. Rolfe in Kew Bull. (1895) 178 et in Journ. Linn. Soc. XXXII (1895) 471. — Alte scandens. Caulis crassiusculus, siccus albido-griseus, 6 ad 7 mm crassus. Folia brevissime petiolata, subobliqua, acinaciformia, e basi paulo latiore sensim angustata, acuminata, crassa, carnosula, ad 20 cm longa, basi 2 cm lata, internodia 10 ad 12 cm longa. Inflorescentiae breves, 3 ad 4 cm longae, circ. 12-florae, bracteae oblongae, acutae, ad 8 mm longae, inferiores paulo longiores. Sepala linearia acuminatissima, dorsale sublatius, omnia 4,5 ad 5 cm longa, dorsale 3 mm, lateralia 2 mm lata. Petala lineari-lanceolata, aequilonga, 5 ad 6 mm lata. Labellum e basi cuneata sensim dilatatum, antice trilobum, margine antice ubique crenulato-dentatum, toto disco venis eleganter maeandricis ornatum, pulvis foliolis v. squamis denticulatis compositus in disco ante dimidium, lobi vix inter se diversi, intermedius apice breviter triangulus, acutus, reflexus, totum labellum 3,5 cm longum, antice inter lobos laterales 1,3 cm latum. Gynostemium rectum lineare, apice subcapitatum. Flores viridi-lutei. Capsula mihi non visa. — Fl. Novembri, culta!

Ecuador: San José bei Balao, Kakaopflanzung, an Schattenbäumen kultiviert, von den Einheimischen „Vainilla" genannt (Dr. Preuss n. 1952! gesammelt am 11. November 1899).

Ich wage es, diese Pflanze mit der zurzeit unklaren *V. odorata* Presl zu identifizieren, welche aus Ecuador stammt. Von dieser Art ist nur die ganz und gar ungenügende Diagnose Presls bekannt, welche ich hier, um das lästige Nachschlagen zu ersparen, im Wortlaut beifüge: „Scapus teres, repens, foliosus, ad articulationes nodosus. Folia brevissime petiolata, erecta, lineari-lanceolata, acutissima, nervosa, carnosa, 5 ad 7 pollices longa, 6 ad 8 lineas lata. Spica brevis, rhachi a floribus delapsis cicatrisata. Flores deperditi. Capsula sessilis, lineari-lanceolata, basi et apice attenuata,

capitellata, semipedalis vel parum longior. Semina nigra nitida aptera. — Guayaquil.

Odorem aromaticum specificum 36 post elapsis annis quod specimina collecta fuerunt capsulae nondum perdiderunt."

Da die Blüten des Exemplars von THADD. HAENKE fehlen, so ist die Frage mit apodiktischer Sicherheit natürlich überhaupt nicht zu beantworten, da jedoch alle Merkmale der PRESLschen Diagnose, wie der Vergleich lehrt (mit Ausnahme der uns fehlenden Kapsel), sich auch an unserem Exemplar finden, so liegt die Vermutung sehr nahe, daß wir es hier mit derselben Art zu tun haben. Dr. PREUSS sagt, daß die Pflanze kultiviert würde, und ROLFE führt sie in seiner oben zitierten Arbeit unter „Vanillas of commerce" auf. Vermutlich ist es eine der stark duftenden Arten, deren Früchte mit etwas verlegenen von *V. planifolia* Andr. oder mit anderen geruchlosen Arten zusammengepackt werden, um diese durch den angenommenen Duft verkäuflich zu machen. Wie intensiv und dauernd der Duft ist, geht ja ans der PRESLschen Notiz hervor. Daß derartige betrügerische Kunstgriffe im Vanille-Handel angewendet werden, ist zur Genüge bekannt.

**Vanilla Preussii** Kränzl. n. sp. — Alte scandens. Caulis tenuis, 2,5 mm crassus. Folia 3,5 ad 4 cm distantia, oblonga v. elliptica, sessilia, apice oblique subito acutata, paulum asymmetrica, 7 ad 8,5 cm longa, ad 4 cm lata, textura satis tenera. Racemi curvuli pauciflori (7 ad 8), bracteae infimae foliaceae, ovatae, acutae, ceterae multo minores, plus minus squamatae, maxima 2 cm longa et basi lata. Ovaria tenui-cylindracea, ad 4,5 cm longa, apice incrassata. Sepala lineari-oblonga acuta, ad 4,5 cm longa, 1,5 cm lata, margine reflexa, undulata. Petala aequilonga, oblongo-lanceolata, acuta, undulata, medio 1,5 ad 1,8 cm lata. Labelli lobi laterales dimidiato-obovati, antice rotundati, lobus intermedius obcordatus, antice profunde sinuatus, discus elevatus, incrassatus, basi carinulis 5 v. 7 mox desinentibus, medio et antice lineis tuberculosis crebris radiantibus praeditus, totum labellum 3,3 cm longum et inter lobos laterales latum, lobi laterales intus lineis gyrosis elevatulis ornati, circ. 2 cm longi, antice 1 cm lati, lobus intermedius antice 2 cm latus. Gynostemium basi ipsa cum labello connatum, fere rectum, antice subcapitatum. Flores albi, labellum macula lutea ornatum. Floret Martio.

Guatemala: Bei der Pflanzung El Baul im Buschwald. Heißt bei den Eingeborenen „Vainilla silvestre" (PREUSS n. 1445!).

Nota: Eine Art aus der Verwandtschaft von *V. parvifolia* Barb. Rodr. und im ganzen Aufbau der Abbildung in der Flora Brasiliensis ziemlich ähnlich, aber die ganzen Formen sind noch zarter und das Labellum mit seinem verkehrt-eiförmigen Mittellappen ist völlig verschieden. Diese brasilianische Art hat von den europäischen Botanikern noch niemand untersucht und wir sind alle auf Herrn BARB. RODRIGUEZ' Text und Tafel angewiesen;

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wenn diese beiden aber auch nur halbwegs korrekt sind, so liegt hier eine neue Art vor. Das Vorkommen einer brasilianischen Art in Guatemala ist sowieso unwahrscheinlich. Soweit der Originaltext von *V. parvifolia* zu verstehen ist, ist dort die Blütenfarbe grün mit weißen oder weißlichen Adern auf dem Labellum, hier ist sie weiß mit einem gelben Fleck auf dem Labellum und dies würde ein weiterer Unterschied sein. Leider fehlen die Früchte.

**Dikylikostigma** Kränzl. nov. gen. *Spiranthidearum*. — Sepala libera, lateralia cum ovario cyathum decurrentem formantia. Petala sepalo dorsali subaequalia. Labellum simplex, ligulatum, convexum, subtus in processus 2 longos auctum. Gynostemium crassum, breve, stigmata 2 valde excavata, cupuliformia, sejuncta, rostellum breve, lineare, anthera in dorso gynostemii, elongata, antice acuta, bilocularis, pollinis massae elongatae rostello arcte affixae. — Herbae terrestres, radices cylindraceae, fasciculatae, caules basi cataphyllis quibusdam brevibus vestiti, monophylli, folium unicum humistratum, scapus ut tota planta necnon flores extus dense glanduloso-pilosus, flores in spicam quaquaversam subcapitatam, laxiusculam dispositi, parvi. — Species nota adhuc 1 venezuelensis, habitu *Holothrichium* africanarum.

**D. Preussii** Kränzl. n. sp. — Radices tenui-cylindraceae, subhorizontales. Caulis infrafoliaceus 2 ad 3 cm altus, cataphyllis 2 v. 3 vaginantibus, brevibus, obtusis vestitus. Folium unicum, humistratum, latissime cordatum, suborbiculare, brevissime acutatum, 3 ad 4 cm longum et latum, glabrum, superne favoso-punctatum. Scapus cum inflorescentia 12 ad 18 cm altus, vagina 1 bracteiformi paulum infra spicam vestitus, ubique praesertim superne glanduloso-pilosus. Spica brevis, primum subcapitata, deinde plus minus elongata, laxiflora, pauci-ad pluriflora, bracteae lanceolatae, acuminatae, dense glanduloso-pilosae, inferiores ovaria subaequantes, summae multo breviores, 8 ad 3 mm longae, ovaria plerumque 8 mm longa. Sepalum dorsale oblongolanceolatum, obtusum, concavum; sepala lateralia basi cum ovario cyathum decurrentem (haud inflatum) formantia, antice libera, paulum deflexa, omnia 3 parte libera 4 mm longa, vix 1,5 mm lata, cyathus circ. 2 mm in fronte ovarii decurrens; haec omnia extus glanduloso-pilosa. Petala triangula, acuminata, sepalum dorsale non aequantia, ab eo libera, circ. 3,5 mm lata. Labellum ligulatum, convexum, obtusum, tota superficie minute papillosum, petalis aequilongum, postice in appendices 2 carnosulas, apice incrassatas auctum. Gynostemium supra descriptum. — Flores luteo-albi.

Venezuela. Bei La Victoria, Savannen südöstlich der Stadt, Grasflächen mit Busch, feucht, 450 m ü. d. M. (Dr. Preuss n. 1626!). — September 1899.



Ein Gewächs ganz und gar vom Aussehen einer der größeren *Holothrix*-Arten oder mancher der kleineren Habenarien aus der *Diphylla*-Gruppe, die bisweilen 1-blättrig vorkommen können. Die beiden Narben bilden jede für sich einen Becher, auf dessen Grund die Narbenfläche sich findet. Andeutungen dieser Bildung kommen bei *Prescottia* vor, so konsequent geteilt wie hier sind die Narben jedoch nirgends. Das Labellum ist seiner ganzen Gestaltung nach das von *Spiranthes*, ebenso der Sepalensporn, in welchem die Anhängsel des Labellum stecken, nur daß dieser sich vom Ovarium, dem er angewachsen ist, nirgend abhebt. Die beiden Anhängsel des Labellums sind wenig kürzer als die Platte dieses Organs und etwas knorpelig verdickt.

# II. Polystachya dendrobiiflora Reichb. f.

Von **Fr. Kränzlin.**

**Polyst. dendrobiiflora** Reichb. f. Otia botan. Hamburgensia II (1881) 76; Durand und Schinz Conspectus Fl. Afric. V. 34; Rolfe in Fl. Trop. Afr. VII (1898) 111. — Pseudobulbi dense aggregati, oblique ascendentes, fusiformes v. elongato-ovoidei, pauciarticulati (— 8), sulcati, supra foliati, 8—13 cm longi, 2—3 cm crassi. Folia subdisticha 4—5 in pseudobulbo quoque, laete viridia, linearia sensim longeque acuminata, apice ipso biapiculata, 12—27 cm longa, 1—2 cm lata, brevi-vaginantia. Scapus folia multo excedens, 60 cm altus, per totam longitudinem vaginis arctis, acutis, brunneis vestitus, apice viridis ibique dense pilosus, post anthesin florum primorum ramulos floriferos gignens. Flores in corymbum brevem ad 20-florum dispositi, bracteae minutae, albidae, quam ovaria cum pedicellis 3—5 cm longa multo breviores, flores ipsi albi pallide roseo-suffusi, illis *Dendrobii barbatuli* omnino comparandi. Sepala ligulata, acuta, lateralia mentum rectangulum breve formantia, 2,5 cm longa, 5 mm lata. Petala paululum breviora et angustiora. Labellum rhombeum, simplex, utrinque obtusangulum v. rotundatum, apice obtusum, apiculatum, eodem colore quo cetera phylla, basi macula elongato-triangula sanguinea notatum, 2 cm longum, vi expansum medio 1 cm latum, totus discus potius pilosus quam furfuraceus (ut vult ill. Reichenbach). Gynostemium generis apicem versus dilatatum utrinque obtusangulum album, basi antice macula sanguinea notatum; anthera generis, pollinia profunde sulcata.

Deutsch-Ostafrika. Blühte im Königl. Botan. Garten zu Dahlem. Das Exemplar wurde von Herrn Assessor Boxberger in Dar-es-Salam gesandt.

Es ist dies die schönste aller bisher bekannten Polystachyen und zugleich die am wenigsten gut beschriebene. Der Originaltext Reichenbachs in den „Otia" — 5 ganze Zeilen — ist alles, was wir bisher über die Pflanze wußten, denn die Stelle in der Flora of Trop. Africa ist nur eine Übersetzung. In dieser Reichenbachschen Diagnose steht aber der ausgezeichnete Vergleich mit *Dendrobium barbatulum* und diejenigen Leser, welche die Tafel 5918 des Botanical Magazine zur Hand haben, gewinnen eine gute Vorstellung von der Blüte dieser *Polystachya.* Die übrigen Charaktere stimmen gut, Dimensionen hat Reichenbach nicht angegeben. Es schien mir deshalb angezeigt, eine genauere Diagnose nach dem lebenden Exemplar zu schreiben, welches dank der guten Kultur im Königl. botan. Garten zur Blüte kam. Die nächstverwandte Art ist wohl *Polyst. gracilenta* Kränzl., ebenfalls ostafrikanischer Herkunft. Im ganzen Aufbau erinnert die Pflanze besonders durch ihre langen dünnen Blütenschäfte und die kurze Traube großer weiß-rötlicher Blumen habituell weit mehr an gewisse Bletien südamerikanischer Herkunft, als an eine *Polystachya*, wozu die stark unentwickelte Kinnbildung besonders beiträgt. Nach dem einen Exemplar zu urteilen ist die Pflanze eine der willig blühenden Arten und abgesehen von der im ganzen tropischen Afrika verbreiteten *Ansellia africana* (dieser Name als Kollektivname für die mehr oder minder guten davon abgetrennten Arten) wohl die schönste epiphytische Orchidee, welche wir von dort erhalten haben. — Der Garten verdankt die Art dem Sammeleifer des Herrn Assessor Boxberger.

Orchidac. Afric. von R. Schlechter Engl. Jahrb. XXVI (1899) 330.

330: Platanthera inhambanensis Schl. – Gracilis, erecta, 20–40 cm alta, caule stricto, terete, glaberrimo, foliato, pennae anserinae crassitudine. fol. erect. v. erecto-pat. lanceolat. basi caule amplect. inferiorib. 5 ad 8 cm lg. infra mediū 1.5–2 cm lt. superiorib. sensī decrescentib. elongato attenuat. demum in bracteas abeuntib. spica subdensa quaquaversa obl. v. cylindrica usq. 10 cm lg. 2–2½ cm diam., bract. lanceolat. v. obl.-lanc. apice elongato-attenuat. vulgo ovarium excedentib. flore breviorib. florib. ill. P. Buchanani Schl. aequimagn. viridib. punct. brunneo-purpur. ornat. Sep. sub aequalib. ovato-obl. obt. 1-nerviis, 5 m̄ lgis, medio 3 m̄ lat. lateralib. basin versus paulum obliq. Pet. erect. oblique ovat. obt. 1-nerv. 4 m̄ lg. supra basin 2 m̄ lt. Lab. e basi concava hemisphaerica, cuneato-obl. apice trunicato-trilobul. lobul. lanceolato-triangul. obtusiuscul. toto 6 m̄ lgo. apice circ. 4 m̄ lt. anthera obt. obov.-obl. rostello humili dentiformi subcucullato, ovar. sessili cylindr. glaberrimo.

Mosambik. In Sümpfen b. Inhambane (R. Schlechter – 26 Februar)

Sehr nahe mit Pl. Buchanani Schl. verwandt, habituell durch längere aufrechte Bl. u. d. Blt. ähre zu erkennen, ausserdem durch d. grössere Lab. verschieden.

Holothrix Buchananii Schl.ⁿ·ˢᵖ· Pusilla erecta, 8–12 cm alta, folia radicalia 2 humistrata carnosa, obl. v. suborbicularia, glaberrima subcoriacea, parvula 1–1,8 cm longa, medio fere 1,3 c̄m lt. pulchre niveo-picta, scapo tereti sparsē puberulo basin versus demum glabrescente, stricto, spica secunda pauci-pluriflora illi H. orthoceratis Rchf. simillima, rhachi puberula, bract. ovat. acumin. sparsē pilosis ovario multo brevioribus. florib. probabil. albid. illis

H. orthoceratis simillim. et fere aequimagn. Sep. ovato-lanc. acuminat. 1-nerv. exter. sparsi pilos. incumbentib. 3-4 mm lg. 1,5-2 mm lt. lateralib. obliqu. Pet. incumbentib. lin-lanc. acut. 1-nerv. glaberr. c. labelli basi in tubu breve antherā occludente connat. 5-6 mm lgir, infra mediū 1 mm lt. Lab. obovato-flabellato, apice breviter 5-lobo, lob. dentiformib. obtus. 5-nervio 7-9 mm lgo, infra apicē 4-5 mm lto, calcari conico obt. subrecto 2½ mm lgo. anthera obtusiss. more generis parvula, rost. humili medio breviter & obtuse 1-dentato, poll. pyriformib. glandula orbiculari.

Nyassaland. (Buchanan)

Eine Art d. Sect. Tryphia, mit H. orthoceras Rf. verwandt, unterschieden durch d. dicken, weiss marmorierte Bl. & durch d. unter sich & mit d. Labell. verwachsenen Petalen, wodurch Bartholina in nahe Verwandtschaft gest. kommt.

Holothr. lithophila Schl. n. sp. — Erecta, villosa 8-15 cm alta. 331.
habitu fere H. condensatae Sond. Tubercb. ovoideis c. 2 cm lg. fol. basilarib. 2 suborbicularib. v. inferiore ovato, acut. utrinq. villos. ad 4 cm lgir, scapo ± flexuoso nudo, villoso, spica densiuscula cylindrica, ∞flora, 3-6 cm lga. bract. lanc. v. ovato-lanc. attenuato-acuminat. sub antheri ovario piloso paulo breviorib. v. subaequilong. villosissim. florib. olivac. Sep. ovato-obl. ovatiove aequilong. 5 mm lg. ciliat. dorso sparsi pilos. basi concav. lateralib. obliqu. Lab. glabro, obl. apice 3lobo, lob. aequilong. lin. obt. intermedio incurvo, lateralib. porrect. 6 mm a calcaris ostio ad apicē lobi intermedii, calcari recto e basi subconica cylindrico obtuso 4 mm lgo. Pet. porrect. ligulat. obt. fere 7 mm lgir, medio fere 2 mm lt. anthera ovoidea obt. glandula transversa 3-cuspidata, poll. pyriformibus. — Decembri.

Kapland: Caledon. Felsspalten der Berggipfel oberhalb der Lagune „Vogelgat" c. 1100 m ü. M. (Schlechter n. 9556)

Mit H. villosa Ldl. & condensata Sond. verwandt, besonders letztere, durch d. Labell. die längeren Pet. den geraden längeren Sporn & d. Glandula, deren 3 Spitzen zwischen d. beid. Pollinien liegen, charakterisiert.

Habenaria mozambicensis Schl. n. sp. - Valida erecta c. 30 cm alta. fol. 2 radicalib. humistrat. utrinq. glabr. suborbicul. obt. 3-3.5 cm diam. caule erecto stricto, laxe vagin. foliac. ovat. acuminat. amplectentib. vestito, terete, glabro, vagin. internodiis breviorib. spica pro genere laxiuscula, 10-20-flora, cylindr. 10-13 cm lga 2-3 cm diam. bract. vaginis caulis simillim. apice versus sensim decrescentibus, ovarium haud superantib. Sep. later. ovato-lanc. subacut. obliqu. nervo mediano incrassato c. 1.2 cm lg. medio fere 4 mm lt.[15], sep. dorsali cucullato simile obl. obtusiusc. dorso crista acuta longitudinaliter ornato, lateral. aequilongo. Pet. 2partit. partitionib. erect. anguste linear. acut. glabr. antica flexuosa, 1.3-1.5 cm lga, postica subfalcata, sep. dors. fere aequilonga. Lab. 3part. segment. lineari-filiformib. patul. glabr. lateral. quam intermed. paulo longiorib. apice incurv. petalorum partitioni anticae fere aequilong., calcari dependente subcylindrico dimidio inferiore paulum ampliato, obt. glabro c. 1 cm lgo; anthera apiculata canalib. ascendentib. stigmata excedentib., rostelli lobo intermedio subulato acuminato, antherae apice subattingente, processub. stigmat. 5-6 mm lgis, apice excis. ovario clavato. - Maio.

Mosambik. Am Grase bei Beira c. 10 m ü. M. (Schlechter)

Verwandt aber robuster als H. Dregeana, mit grösseren Blt. andrem Rostellum & Narbenfortsätzen. Sep. grün. Pet. et Lab. weiss. ein gutes Kennzeichen ist der Kamm auf dem Helm.

332. Habenaria trilobulata Schl. n. sp. = Erecta glabra 20-40 cm alta, fol. basilar. 2 humistrat. ovato-orbicular. breviter acuminat. sicc. tenuib. caule macro stricto v. subflexuoso, vagin. plurib. remot. lanceol. aristato-acuminat. vestito; racemo obl. plurifloro (5-15) laxo, bract. lanc. aristato-acuminat. ovario

gracili breviter pedicellato multo brevioribus, floribus albidis illis H. Kraenzlinianae Schl. similib. vix aequimagn. Sep. lat. oblique obl. subacut. patul. c. 6 mm lg. medio fere 3 mm lt. sepalo dors. cucullato ovat-obl. obtusiusculo, lateral. aequilong. Pet. fere mediu usq. 2partit. partitione posteriore obl. obt. sepalo dorsali paulo breviore, partitione anter. longissima filiformi, 1½-2 mm lga, Lab. 3partito, partition lateral. filiformib. glabr. partitioni anticae petalorum simillim. aequilong. que, partit. intermed. lineari obt. c. 5 mm lg. calcari filiformi apice versus vix dilatato 2-2,5 cm lgo, anthera parvula acuminata, rostello majore concavo mediu usq. 3lobulato, 4 mm alto, lob. intermedio ovato-triang. obtusiusculo, lateralib. 2plo minorib. angustiorib. q. apice polliniorum glandulā gerentibus, antherae canalib. genuflexo-ascendentib. processus stigmatic. subcylindric. apice paulū incrassat. porrect. 4 mm lgis staminodiis parvul. linearib. erectis. Aprili

Mozambik. In Urwäldern bei der 25 Miles-Station im Gebiete der Companhia de Mozambique c. 30 m ü. M. (Schlechter ohne n.)
Neben H. armatissima Rf u. Kraenzliniana Schl. zu stellen.

Cynorchis oblonga Schl. n. sp. – Gracilis erecta 10-20 cm alta, folio basilari vulgo solitario (interdu 2) obl. apiculato glabro, basi amplectente, erecto-patente 5-10 cm lgo, 1.5-4 cm lto, caule substricto v. flexuoso, medio v. infra mediu vagina lanceolato-acuminato amplectente, parvula ornato, glabro, apice 1- v. 3-floro, bract. vaginae quā maxime similib. ovario multo brevioribus. Sep. obl. obt. concavis 6 mm lgis, 3 mm lt. intermedio c. pet. in galeā cucullatā obtusā agglutinato. Pet. oblique obl. obt. sep. dorsali aequilongis 2-3 mm ltis. Lab. 4-fido, circuitu obl. approximat. obl. 9-10 mm lgis, calcari filiformi subincurvulo, lobis lateral. subfalcato-divergentib. obl. obt., lobis intermed. 333.

1,5 ad 1,7 cm lgo, anthera emarginata obt. locul. incurv. rostello minore cucullato, processul. stigmat. crassis, falcato-incurv. integr. v. obscure trilobulat. ovario elongato-subcylindr. basi apic(q.) paulo angustato

Mozambik. An Sumpfrändern in Urwäldern bei Beira, im Gebiet der Campanhia de Mozambique (Schlechter, im April blühend.

Disperis anomala Schl. n. sp. — Herba erecta, sicca nigricans, 15 cm alta, caule stricto laxe foliato, basi puberulo, superne glabro terete, apice pauci-(2-)floro. fol. 3 lanc. acut. v. acuminat. utrinq. glabr. basi caule amplectentib. florib. niveis (fide collectoris) in sicc. nigrescentib. ill. D. gracilis Schl. primo aspectu persimilib. bract. foliac. concav. lanc. acuminat. ovariū nunc paulo excedentib. nunc aequantib. Sep. lat. porrect. oblique lanc. acumin. medio saccato, (receptaculo glandularū) ornat. 1 cm lgis, medio fere 4 m̄ alto saccato obt. vix 3 m̄ lgo, sep. dors. cucullato acumin. lateral. aequilongo. Pet. e basi angusta oblique lanc.-subfalcat. acumin. 9 m̄ lgis. Lab. ungue lineari columnae alte adnato 4 m̄ lgo, lamina 1 cm lga peltata subnaviculari, circuitu lanceolata, parte anter. concava intus verruc. biseriat. ornato, apice acuminata genuflexo-ascendente, parte poster. sensī angustata lin. apice bifida, anteriori subaequilonga, col. permagno stigma modo singulari amplectente dorsio anteriore trilobulato, lobul. lateral. parvul. rotundat., lobo intermedio lineari-elongato ascendente, labelli apicē posteriorē subattingente 5 m̄ lgo, apice incurvulo, dimidio poster. amplo convexo antherā obtegente, marginib. recurv. apice obtusa, circuitu orbiculari brachiis porrect. strict. apice haud incurv. anthera subemarginata locul. obt. canalib. glandulifer. pro genere abbreviat. caudiculis demū deflex. stigmate bene conspicuo trilobo. col. rotundatis pulvinatis. — Fl. Februario.

Natal. Im Grase b. Nottingham Road; c. 1500 m ü. M. (Wood n. 6078)

Trotz Ähnlichkeit mit D. gracilis Schl. u. stenoplectron Rf. sehr eigenartig. Das auffallendste Merkmal ist der Körper vor dem Stigma, den Schl. als Rostellum ansieht, ferner biegen sich die dünnen fleischigen Antherenkanäle so stark nach unten, dass man sie für Narbenfortsätze halten kann, da sie an Habenaria erinnern.

334.

Eulophia antennata Schl. n. sp. – Herba pallida perennis, aphylla, gracil. erecta v. ascendens 1–2 pedal. pseudobulb. subterraneis oblique ovoideo-obl. subcylindric. v. saepius paulū depress. caulib. vulgo geniculat. basi vagin. acuminat. rigidiuscul. densius vestit. gracilib. ± flexuos. vagin. superiorib. parvul. ovat. acuminat. distantib., spica laxa, ∞ flora, elongata, vulgo subsecunda, usq. ad 30 cm longa, bract. ovato-lanc. acut. v. acuminat. ovario gracili breviter pedicellato multo brevior. florib. pallid. erecto-patentib. sep. linear. dimidio inferiore paulū attenuat. 1,7 cm lg. supra mediū 1,5 m̄ lt. 1-nerv. intermedio vulgo ascendente, lateralib. erect. subfalcat. Pet. obl. apiculat. 3-nerv. 1,1 cm lg. supra mediū vix 3 m̄ lt. Lab. circuitu obl. 3lobo, nervis intermediis subincrassat. exceptis subnudo, lob. lat. abbreviat. lobo intermedio subquadrato-rotundato, apice interdū subemarginato, calcari conico obtuso 4 m̄ lgo. toto lab. 1,2 cm lgo. medio 8 m̄ lato, lobo intermedio 5 m̄ lt. a basi ad apicē usq. lobor. lateral. 9 m̄ lgo, col. 6 m̄ lga, anthera dorso gibbere obt. erecto donato, pollin. globos. caps. pedicellata, clavato-obl. deflexa. – Fl. Januar. Febr.

Mossambik. Im Schatten neben d. Flusse Inkomati gegenüber d. Insel Incanhini im Gebiet d. Delagoa-bay. ; in Urwäldern b. Marrinqa im Gebiet von Inhambane (beide x Schlechter ohne n.)

Bildet zusammen mit E. galeoloides Kr. & gastrodioides Schl. eine Gruppe unter einander sehr verschiedener, alle 3 bleiche, blattlose Pfl. & wohl Saprophyten.

335. Eulophia biloba Schl. n. sp. – Gracilis elata 60–100 cm alta, erecta, Pseudobulb. subterran. ignotis, caule cylindrico erecto, apice foliato emittentib. fol. caulin. lin. subacut. textura rigidiuscul. glaberr. 30–40 cm lg. 8–13 mm lt. scapo radicali ad basin foliorum gracili stricto v. paulum flexuoso, interdum ramoso, vagin. dissit. arcte amplectentib. mox emarcescentib. donato laxe racemoso v. paniculato, pluri- v. ∞ floro, bract. patentib. lanc. acuminat. ovario graciliter pedicellato pluries brevioribus. florib. petalis mag- nitudine & forma illor Acrolophiae tristis Schl. & Bolus in mente revocantib. Sep. linear. v. lin-obl. subacut. 3-nerv. 7 mm lg. intermedio 3 mm lt. lateral. subfalcat. 3 mm lt. Pet. sepalorum longitudine sep. lat. bene imitantib. lin.- subfalcat. acut. medio paulo dilatat. latitudine vix 2 mm excedentib. obscure 3-nerv. Lab. cuneato, bilobo basi lamell. 2 humilib. ornato, nerv. 3 intermediis subinc serrat., 7 mm lgo, explanato 1.2 cm lto, lob. divergentib. oblique rotundat. basi angustato, calcari subcylindrico, obt. 4 mm lgo, col. brevi apoda 2.5 mm alta, anthera rotund. dorso gibbere retrorsum spectante donato, pollin. rhomboid. paulum compress. stipite brevi quadrato, glandula quadrato-oblonga stipite majore. – Aprili. Mossambik. Im Gestrüch b. Beira im Gebiet d. Campanhia de Mozambique (Schlechter ohne n.)

336. Eulophia collina Schl. n. sp. – Terrestris erecta. 18–30 cm alta. habitu Eul. brachystylae Schl. simillima, pseudobulb. subterranei: rhomboideo-obl. paulum depressis, ad 4 1/2 mm lg. 2 mm crassis, fol. radical. fasciculat. sub anthesi scapo brevioribus rigidiuscul. linearib. acut. 3–4 mm lt. conduplicat. nervos., scap. basilarib. strict. vel ± flexuos. vagin. pauc. amplectentib. internodiis brevioribus ornat. racemo

laxius plurifl. quaquaverso, 4-7 cm ([illegible]) lgo, bract. lanc. acuminat. ovario aequilong. v. paulo brevioril. florib. ill. E. violaceae Rf. subaequimagnis Sep. subaequalib. obl. 3-nerv. intermedio apiculato, lateralib. paulū oblique sub apice extus carinato-apiculat. 8 m̄ lgis medio fere 4 m̄ ltis. Pet. quā sep. paulo brevioril. obl. breviter apiculat. erect. 7 m̄ lg. 4-5 m̄ ltis, 5-nerv. Lab. circuitu obl. 3lobo, carinis 3 carnos. a calcaris ostio usq. infra apicē lobi intermedii apice obtus: liber. lob. lateral. erect. parvul. lobo intermedio subquadrato, apice truncato, lab. toto 8 m̄ lgo supra mediū ad apicem loborū lateraliū 4 m̄ lato, lobo intermedio apice 3 m̄ lto, col. aptera, semiterete, anthera subemarginata, pollin. globos. stipite ligulato, glandula subquadrata ampla, ovario pedicellato clavato, glaberrimo. – Augusto.

Natal. Zwischen Gras bei Mt. Edgecoombe 100-120 m ü M. (Wood). (n. 5783)

Gehört in d. Verwandtschaft von E. brachystyla Schl. Unterschiede im Labell.

Eulophia brachystyla Schl. n. sp. – Gracilis, erecta 20-35 cm alta, habitu E. hians Spr. similis, pseudobulb. rhomboideo-obl. depress. subterran. parvul., fol. radicalib. fasciculat. 2-4 erect. acut. sub aestivatione jā bene evolut. rigidiusculis, scapo vulgo paulo brevioril. interdū aequilong. 15-26 cm lg. 3 ad 5 m̄ ltis, scapo erecto substricto vel ± flexuoso, vagin. 3-4 lanc. arcte amplectentib. dissit. vestito, racemo laxius plurifl. quaquaverso, obl. 6-8 cm lgo, bract. lanc. acuminat. quā ovariū pedicellatū duplo brevioril. florib. ill. E. violaceae Rf. similib. Sep. obl. apiculat. 5-nerv. 1 cm lg. medio fere 2,5 m̄ lt. Pet. sepal. fere aequilong. late obovato-oblong. obt. plurinerviis supra mediū 6 m̄ latis. Lab. 3lobo, lob. lateral. oblique obl. obtus. erecto divergentib. lobo intermedio obl. apice subtruncato-obtusato, lin. 3-5 papillarū e basi usq. infra apicē ornato, toto lab. 1 cm lgo. ad apicem loborū 7 m̄ lato lobo intermedio 7 m̄ lgo. apice 3 m̄ lt. calcari brevi subcylindrico obt. 3 m̄ lgo. col. brevi 4 m̄ lga, anthera rotundata dorso sulcata, poll. obovoid. globos. stipite ovato-obl. glandula aequimagna, ovario post antherā deflexo. – Januario

Natal: an felsigen Stellen auf d. Gipfel des Insiswa, in Griqualand East. 2200 m ü. M. (Schlechter n. 6489) – Zu d. Verwandtschaft d. E. hians Spr. gehörend.

337. Eulophia gastrodioides Schl. n. sp. – Herba perennis tuberosa aphylla, subsaprophytica, 20–30 cm alta, pallida, rhizomate subterraneo oblgo, apice acuto elongato, articulato, radicib. null. caule laterali stricto v. paulu flexuoso, vagin. inferiorib. dense imbricatis cucullat. apice subtruncat. interdu breviter apiculat, vagin. superiorib. ~~[illegible]~~ lanc.-cucullat. acut. distantib. racemo laxe 5–10-fl. elongato, bract. vagin. superiorib. similib. lanc. acut. ovario breviorib. florib. pallid. illis E. laxiflorae Schl. similib. vix minorib. Sep. subaequalib. lin.-obl. obtus. basin versus paulu angustat. vix 7 mm lg. medio fere vix 2 mm ltis. Pet. sep. valde similib. medio vix latiorib. subaequilong. Lab. trilobulato, e basi semiorbiculari in lobu intermediu anguste oblong. obtusu producto, ad basin lobi intermedii callo parvulo obl. ornato. basi c. columnae pede producto calcar cylindricu obtusu 2 mm lgu formante 5 mm a calcaris ostio usq. ad apice lobi intermedii lgu. col. semiterete 4 mm lga, pede producto, anthera obl. rotundata pollin. subglobos. stipite lin. glandula parva. – Aprili.

Mossambik. In Urwäldern bei d. 25 Miles-Station im Gebiet der Companhia de Mozambique (Schlechter ohne n.)

Mit E. galeoloides Kr. verwandt, aber durch Inflorescenz u. Blt. verschieden.

Eulophia humilis Schl. n. sp. – Terrestris 10–20 cm alta, pseudobull. subterran. ovoideo-obl. erect. 2.5 cm lg. 1.5 cm diam. fol. radicalib. fasciculat. sub anthesi nondu omnino evolut. scapo breviorib. lin. acut. nervos. textura rigidiuscul. 3 mm lt. scapo basilari terete, vagin. 2–3 cucullat. parvul. ornato, racemo laxo paucifloro 4–5 cm lgo. bract. lanceol. setaceo-acut. erect. qua ovariu gracillimu pedicellatu duplo breviorib. florib. ill. E. leontoglossae Rchb. f. fere aequimagnis

Sep. lanc. obl. acut. v. subacut. 3-nerv. 9mm lg. medio fere 3mm lt. Pet. qu. sep. paulo brevior. obl. apiculat. 3-nerv. 7mm lg. 3mm lt. Lab. circuiter obovato-obl. 3lobo, medio nervis 3 incrassat. subpapilloso-granulos. a calcaris ostio usq. supra medium lobi intermedii percursum, lob. lateralib. triangul. obtus. antice praemors. subundulat. lobo intermedio suborbiculari obtusissimo margine subundulato-crispato, col. apoda semiterete, anthera dorso gibbosa.

Mozambik. Auf feuchten sandigen Grasrieren am Rande d. Urwälder b. Beira im Gebiet der Comp. de Mozambique 7 m ü. M. (Schlechter...)
Gehört zur „hians"-Gruppe, erinnert habituell an E. chlorantha Schl. Nur in 1 schwachen Ex. gefunden – blüht im April.

Eulophia litoralis Schl. n. sp. – Valida erecta 1-2ped. pseudo- 338.
bulbo subterraneo obliquo crasso 5–8 cm lgo 3–5 cm diam. fol. sub anthesi omnino deficientib. caule stricto vagin. 8–10 submembranac. obt. alte connat. arctius amplectentib. basi densius dimidio superiore remot. vestito, spica subcylindrica laxe pluri(-20)flora, 10–15 cm lga. florib. aureis erect. breviter pedicellat. bract. membranac. lanc. v. ovato-lanc. acut. quam ovar. pedicellatum breviorib. v. interdum aequilong. Sep. subaequalib. lanc. acuminat. glabr. 2.1 cm lg. medio fere 6mm lt. lateral. basi obliqu. Pet. sep. fere aequilong. acuminat. medio tantum latiorib. 9mm latis. Lab. 3lobo a calcaris ostio ad apicem lobi intermedii 2.2 cm lgo. lob. lateral. oblique ovat. obtus. intermedio duplo longiore rotundato, fere 1.2 cm lgo, carinul. 2 parallel. e calcare usq. ad basin lobi intermedii nunc in lineas 4–6 papillarum acutar. medium lobi excedentes dissolutis, labelli c. columnae pede producto calcar breve obtusum c. 4mm lgum formante, col. semiterete apiculata c. 1.3 cm alta, anthera galeata obtusa, pollin. rotundat. – Novembri.

Capland. Auf Sanddünen b. Hawston an d. Mündung des Bot River Distr. Caledon.
Durch d. zur Blütezeit fehlenden Bl. mehr d. indischen Arten als d. s.afrikan. verwandt. im übrigen E. inaequalis Schl. aus Natal nahe stehend.

339. Eulophia Pentheri Schl. n. sp. — Herba perennis 100-150 cm alta E. speciosae Bol. var. Culveri Schl. simillima. Pseudobulb. rhomboideo-obliqu. paulū depress. ill. E. speciosae similib. aequimagnisq. fol. lin. carnos. sub anthesi nondū evolut. scapo multo brevioribus ad 2 cm ltis, scapo erecto, stricto, gracili, vagin. pauc. (2-3) cucullat. distitis ornato, racemo laxe pluri- v. coflora, elongato, quaquaverso, bract. mox patentib. ovato-lanc. ovario pedicellato pluries brevioribus. florib. patulis ill. E. speciosae v. Culveri aequimagn. & valde similib. Sep. more E. speci. reflexis obl. obt. 5-nerv. 6 mm lg. medio vix 3 mm lat. lateralib. basi obliqu. Pet. erect. suborbicularib. v. subreniformib. 1 cm lg. medio fere 1-1.2 cm lt. apice obtusiss. plurinerv. Lab. circuitu subhastato, e basi dilatata laterib. erect. in lobū convexū oblongū obtus. sensi͞m angustato, medio lobi antici gibbere usq. ad ostiū calcaris nerv. carunculato - incrassat. ornato, calcari supra basin labelli recurvo conico obt. 5 mm lgo. toto lab. 1.5 cm lgo, explanato basi 1 cm lato, lobo anteriore medio 6 mm lt. col. apoda brevi 5 mm lga. anthera medio sulcata, obt., pollin. rhomboideo-globos. stipite lorato, lin. glandula parvula transverse obl. caps. clavata deflexa.

Matabeleland. Kalahariregion: b. Lizombwe (Penther - Decemb.)
Transvaal. Bei Komati Poort c. 350 m ü. M. (Schlechter - Decemb.)
Gleicht E. speciosa v. Culveri im Habitus, hat aber einen Sporn & andere Umrissformen im Lab. Auch d. Farbe d. Blt ist verschieden, welche sie ist, sagt Dr. Schl. aber nicht. Ferner nimmt er an, dass d. Knospenlage der Bl. nicht convolutiv ist (Bolus Ansicht) sond. duplicativ z. sein scheint.

Eulophia taenioides Schl. n. sp. Terrestris gracilis 30-50 cm alta rhizomate brevi subterraneo repente, pseudobulb. homoblastis unifoliat. lecoid. sublaevib. articulo inferiore ovoideo-conico 2.5-3 cm

alto, 1-1,5 cm diam. articulo superiore petioliformi terete, subincurpicue lineato 6-8 mm lgo 3 mm diam., folio ovato v. ovato-elliptico acuto, texterea coriaceo 8-10 cm lgo, medio fere 3-4.5 cm lto. paulo obliquo, graciliter petiolato, petiolo articulo superiori pseudobulbor. simillimo, aequilongo, facie tantum canaliculato, scapo basilari gracili erecto, vulgo ramoso, terete, glabro, vagin. pauci. dissit. arcte amplecten-tib. ornato, panicula laxe pluri- v. ∞flora, bract. lanc. acuminat. mox emarcid. ovario gracili 3-4 x brevioril. florib. ill. E. barombensis Kraenzl. similib. Sep. lin-obl. obt. brevissime apiculat. basin versus paulum angustat. 6-7 mm lg. supra medium 2 mm ltis. Pet. erect. sep. brevioril. tamen latioril. obl. obt. 5 mm lg. medio 3 mm lt. 3-nerv. Lab. 4-lobo, basi breviter 2lamellato, lob. later. brevil. obt. erect. lob. anterioril. subquadrato-obl. rotundat. subdivaricat. lamina tota 7 mm lga, medio 4 mm apice 8 mm lata, calcari subconico obt. 5 mm lgo, col. sepalis 2plo breviore, anthera apice gibbosa, obt. pollin. rhomboideo-obovat. stipite obl. brevi, glandula transverse obl. parva capsula clavata pedicellata, pendula. — Februario.

Mossambik. In Urwäldern zwisch. Morumbene u. Marringa im Gebiet von Inhambane, circa 20 m ü. M. (Schlechter, ohne n.)

Soll mit E. alismatophylla Rchf. verwandt sein, aber wie er scheint durchaus verschieden im Lab. auch d. Masse der Bl. stimmen nicht.

Acrolophia fimbriata Schl. n. sp. — Erecta e basi parum ramosa, caulescens nunc frutescens, caulib. foliat. fol. distich. equitantib. ensiformib. acut. margine carinaq. minute serrulat. rigid. 15-25 cm lgis, panicula terminali, pedunculo ramulisque vagin. lanc. submembranac. ± dissit. vestito, bract. lanc. v. ovato-lanc. acut. ovario pedicellato paulo brevioril. v. aequilong. Sep. ovat. obtusiuscul. glabr. minute pellucido-punctat. 5 mm lgis. medio fere 3 mm lt. Pet. oblique ovat. obtusiuscul. minute pellucido-punctat. glabr. 4 mm lg. medio vix 3 mm lt. Lab. cochleari-concavo, 340.

circuitu obl. lob. lateral. erect. rotundat. obt. intermedio valde concavo, rotundato-obtuso, margine undulato-crispato, lob. lateralib. conspicue majore, 4 m̄ a calcaris ostio usq. ad apicē lobi intermedii, lineis 2 carnosulam̄ e basi labelli in lobo intermedio in lineas 4 dissolut. calcari brevi, subgloboso, obtusissimo. vix 2 m̄ lgo. col. apoda 3 m̄ lga, anthera semiglobosa, obtusa, poll. subglobosi stipite late lineari glandula subquadrata, caps. pendul. ovoid. 1.5 cm lgis c. 1.2 cm diam. Decembri.
Capgebiet. Auf steinigen Hügeln bei Rietfontein Poort im Distr. von Bredasdorp 40 m ü. M. (Schlechter n. 9703)
Mit Acr. cochlearis Schl. et Bol. u. micrantha Schl. & Bol. nahe verwandt, hat aber nicht verspinierte Blt. & weicht ab in Sporn & Lab.

341 Polystachya melanantha Schl. n. sp. — Humilis caespitosa decumbens, pseudobulb. ovoid. heteroblast. basi vaginis mox emarcid. obtectis 8–10 m̄ alt. 5 m̄ diam. fol. articulat. 2 ad apicē pseudobulbi, obl. basin versus paulū angustatis, apice obtus. breviter excis. 1.7–1.8 cm lg. supra mediū 7 m̄ lat. textura subcoriat. scapo terminali gracili, filiformi 1–2 floro, puberulente, 2–3 cm lgo. bract. parvul. lanc. glabr. florib. inter majores, sicc. nigricantib. Sep. lat. ovato-lanc. obtuse acuminat. obliqu. basi lata columnae pedi adnatis 1.1 cm lg. basi 6 m̄ ltis, sep. intermedio lanc.-obl. obt. concavo lateral. aequilongo. Pet. e basi angustata lin.-obl. obt. 9 m̄ lg. medio fere 3 m̄ ltis. Lab. rhomboideo e basi cuneata medio ampliato, angul. obt. dimidio superiore sinuato-obcuneato obt. 1.1 cm lgo (sepal. aequilgo) medio fere 8 m̄ lt. intus medio incrassato, glabrrimo, col. gracili semiterete 7 m̄ lga, in pede 5 m̄ lgū c. labelli basi mentū obt. formantē producto, poll. ovoideis.

Mossambik. Auf Bäumen der Urwälder b. Beira an d. Mündung der Flusses Pungwe 15 m ü. M. (Schlechter, ohne n.)
Eine der wenigen Arten mit heteroblastischen Knollen & verwandt mit P. Ottoniana R. f. [& P. 1-flora Willd. falls diese nicht synonym ist.]

Liparis hemipilioides Schl. n. sp. — Herba perennis tuberosa, 15–20 cm alta, tubere ovoideo 1,5–2 cm lgo, fol. basilari solitario, hemistrato ovato-cordato, glabra, textura tenui; scapo gracili mono stricto mono ± flexuoso, 3–5-floro, teretiusculo, vagin. pluerib. minut. lanc. acut. laxe ornato, bract. vagin. valde similib. lanc. acut. ovario breviter pedicellato plur 2plo breviorib.. Sep. later. in segmentum late oblongum, basin versus vix angustatum, apice breviter excisum 6 mm lgum medio fere 5 mm ltum connatis, sep. postico lin. obt. marginib. revolut. 7 mm lgo, Pet. sep. dors. valde similib. aequilongisq. Lab. subpandurato e basi dilatato-auriculata constricto, margine incrassato, deinde in lobum subquadrato-obl. obtusissimum, apice breviter emarginatum ampliato, callo obscuro bicruri parvulo basi ornato, medio lobi ruguloso-incrassato 5 mm lgo, lobo circ. 3 mm lto, col. gracili 4 mm lgo, apice versus subincurvulo, dilatato, antherae operculo obl. apice versus pr... angustato, poll. ignot. ovario clavato glabro. — Aprili.
Mossambik. In Urwäldern bei d. 25-Miles Station im Gebiet der Compan. de Mozambique (Schlechter, ohne n.)
Die erste südafrik. 1-blättrige Art aus d. Verwandtschaft von L. Thwaitesii Hook. f. durch d. niederliegenden Bl. schlanken Schaft & daran Grunde gehöhlte Lab. gut charakterisiert. — Bl. dunkelgrün, Sep. & Pet. olivengrün. Lab. violett, Scheint sehr selten zu sein.

Bulbophyllum melinostachyum Schl. n. sp. — Caespitosum reptans, epiphyt. internodiis vagin. cucullat. laxe vestit. pseudobulb. dissit. obl. obscure 4 gulanib. 1,5–2 cm lgis medio fere 7–10 mm 342.

diam. bifoliat. fol. obl. ligulat. basin versus paulū angustat. apice obt. breviter excis. coriac. 4-7 cm lg. medio fere 8-15 m̄m lt. scapo erecto, apice curvo. 7-10 cm lgo, vaginul. parvul. dissit. ornato, spica disticha elongata, rhachi more B. Pervillei Rolfe paulū incrassata, florib. parvul. aurantiac. invers. bract. ovat. acuminat. flore aequantib. v. paulo brevioribus. Sep. ima basi connat. 3 m̄m lgis, triangulari-ovat. acuminat. Pet angusti lineari. (subfiliformib.) subfalcat. 1-nerv. sepalis paulo brevioribus. Lab. carnoso, breviter unguiculato, lamina obl. basi auriculato-sagittata, subtus sulcata 1.5 m̄m lga. col. brevi, pede producto, anthera humili, obt. antice breviter excisa, poll. subglobos. paulo compress. — Aprili. Blt. orangerot.

Mossambik. Auf Bäumen der Urwälder bei d. 25-Miles-Station Gebiet d. Compank. de Mozambique c. 30 m ü. M. (Schlechter, 12250!)
Zwischen B. Pervillei Rolfe & B. nutans Thouars

Angraecum anocentrum Schl. n. sp. — Subacaule v. breviocaule, fol. distich. ligulat. apice valde oblique & inaequaliter 2bis. basin versus paulo attenuat. 12-17 cm lg. medio fere 1.5-2 cm lt. coriac., racemo foliis opposit. subaxillarib. simplicib. v. (saepius) ramos. mox folior. longitudine mox paulo longiorib. vaginul. breviib. tumat hinc inde ornat. laxe pluriflor. gracilib. bract. ovat. acut. v. acuminat. ovario sessili brevioribus. florib. viridib. v. viridi-flavescentib. tenuib. patentib. Sep. ovato-lanc. acut. v. acuminat. extus subcarinat. 8 m̄m lg. infra basin 4 m̄m lt. lateral. subfalcato-oblique. Pet. quā sep. paulo brevioribus oblique ovato-lanc. acuminat. 1-nerv. 6 m̄m lg. infra mediū 3 m̄m lt. Lab. cochleari-concavo, ovato, acuminat. obscure 7-nerv. 7 m̄m lgo.

calcari ascendente filiformi, apice paulo ampliato incurvulo c. 12 mm lgo. Col. brevi semiterete, anthera obtusa semiorbiculari, rostello brevi, poll. globosis. – Februario.

Mozambik. Epiph. auf d. Zweigen d. Urwaldbäume b. Massinga im Gebiet von Inhambane c. 30 m ü. M. (Schlechter, ohne n.)

Neben A. caulescens Lindl. von Mauritius & Madagascar sowie A. saccifera Lindl. unterzubringen.

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Angraec. trachyrhizum Schl. n. sp. – Epiph. ascendens v. erectum, ramosum, ad 5 cm lg. radicib. foliis opposit. dense squamell. verrucosq. asperat. flexuos. caule ramulisq. teretib. tectis. glabr. dense basib. foliorum verruculos. apice 3dentat. vestitis, fere 5 mm diam. foliat. fol. perrarr. coriac. patentib. lin.-obl. inaequaliter bilob. lob. rotundat. 4-7 cm lg. medio fere 7-12 mm lt. florib. minut. singul. v. ternis, folio ima basi opposit. breviter pedicellat. pedicell. patentib. filiformib. calcari brevioribus. Sep. ovato-obl. obtusiuscul. extus squamell. brunneis spars. ornat. 4 mm lg. Pet. lin. obtus. glabr. sepalor. longitudine, labello angusto obl. integro, basi marginibus ostii calcaris subincrassato, calcari paulum incurvo filiformi 1 cm lgo Col. brevi crassiuscula, rostello apice porrecto linguaeformi, glandula suborbiculari, stipite e basi angustata pollinia versus sensim dilatato, indiviso, poll. globos. subsessilib. stigmate faciē columnae fere omnino oblegente. – Aprili.

Mozambik. Auf Urwaldbäumen bei d. 25-miles-Station im Gebiet der Compagnie de Mozambique 50 m ü. M. (Schlechter, ohne n.)

Verwandt mit A. tridentatum Harv. von Natal & Zululand, durch d. ungeteilte Lab. & d. Bl. sowie deren ungleiche Scheiden gut gekennzeichnet. Die Analysen. Bolus Ic. Orch. Austr. Af. I, 2 t. 53 stimmen gut zu Schl. Exemplar.

Angraecũ Woodianum Schl. n. sp. — Epiphyt. ascendens v. dependens ad 15 cm lgũ, radicib. numeros. teretib. Caule simplice terete glabro, foliato, basin versus basib. foliorũ striat obtecto, fol. pro genere tenuiorib. obl.-ligulat. valde inaequaliter 2lob. 8–16 cm lgis. racem. nunc solitariis nunc 2–3 nis, gracilib. ∞ flor. ad 10 cm lgis, bract. abbreviat. cucullato-amplectentib. acuminat. ovario multo brevioribus. Sep. anguste obl. ~~acut~~ obt. 3 m̃ lgis, 1 m̃ ltis. Pet. obovato-obl. obt. six sepalor. longitudine. Labello rhomboideo (obscure 3lobulato) obt. 3 m̃ lgo medio fere 3 m̃ lto, calcari filiformi incurvo 7 m̃ lgo, ovariũ plus 2plo excedente, Col. brevi subglobosa, rostello 3-lobulato, lobul. lateral. triangul. lobulo intermedio linguiformi, lateralib. 2plo longiore; glandul. 2 separat. stipitib. subfiliformi~~b~~-linear. apice versus paulũ incrassat. pollin. sphaeroideis. —

Nyassaland: (Buchanan) J. M. Wood comm. sub. n. 6027 herb. Natalensis.
Von Schl. neben Acranthus xanthopollin. Rbf. gestellt, welche Gatt. er zu Angraecum rechnet.

Die von W. Goetze u. Dr. Stuhlmann im Ulugurugebirge ges. Pflanzen. Der Hermann-Wentzel-Stiftung. ~~Die~~
Die Orchidaceen von Fr. Kraenzlin

in Engler's Jahrb. XXVIII (1901) 367–374.

367. Holothrix Lastii Rolfe in Fl. trop. Afr. VII, 195.
Uhehe. An trockenen Bergabhängen auf rotem Laterit b. Makombe. Fusshoch. Blt. reinweiss. — Goetze n. 682. — Febr. Einh. Name: syongi.

Cynosorchis platyclinoides Kr. n. sp. Planta habitu & facie omnino Platyclinis glanduloseae R. f. Caulis pergracilis ad 70 cm alt. fol. ad 4 basilaria e basi amplexicauli breviter petiolata, lanc. acuta, ad 12 cm lg. 2–2,2 cm lt. additis foliol. 2 in scapo valde distantib. sessilib. scapo per tota altitudine sparsim supra densius glanduloso-piloso, spica elongata (–15 cm), rhachi, bract. ovariis glanduloso-pilosis, bract. ovat. acut. ovaria non aequantib. 7 mm lgis. Sep. dorsali ovato-acuto, lateral. oblong. Pet. ovato-lanc. omnib. acut. Lab. omnino integro lin. obtuso subbreviore, processus stigmat. et antherae canales brevissimi, rostellum minutum. Flores inter minimos generis illis Platyclinis subaequimagni violacei sep. et calcar 3.5 mm lga, lab. 4 mm, pet. 2 mm lga. – Novembri.
Süd-Uluguru. c. 1000 m ü. M. Sumpfige Stellen am Bachbett (Goetze n. 224.!) Eingeb. Name Chigna.

Ich kann die Pfl. nicht besser charakterisieren als durch d. Speciesnamen, sie gleicht durchaus einer schlanken Platycl. glandulosa.

Cynosorchis calcarata Kr. et Schinz, Consp. V, 90.

Central-Uluguru. Auf dem Lukwangulo-Plateau an einem trockenen begrasten Abhang, selten! (Goetze n. 282 – Novemb.) Blt. hell lila, Lippe nach d. Schlunde zu weiss m. dunkleren Flecken.

Habenaria humilior Rchb. f. Otia II, 100. 368.
Uhehe. Iringa auf d. Kilima-Plateau, in feuchten Einsenkungen (Goetze n. 703 blüht im Februar)

Habenaria Schimperiana Hochst. ex A. Rich. Fl. Abyss. II, 295 (3)
Uhehe. Utschungwe-Berge, bei Ndegere auf Matten um 1600 m. (Goetze n. 600) – Februar.

Habenaria membranacea Lindl. Gen. & Sp. 313. forma minor Rgl. Uhehe. Ripundi-Berge um 1900 m (Goetze n. 672) – Febr.

Habenaria Goetzeana Kränzl. in Engl. Jahrb. XXVIII (1901) 173.
Uhehe. Iringa. auf luftiger, hügeliger Steppe 1600 m (Goetze n. 664)
Habenaria ambigua Kränzl. in Engl. Jahrb. XXVIII (1901) 175.
Uhehe. Wern-Landschaft (Goetze n. 700) - Februar.
Habenaria macrura Kränzl. in Engl. Jahrb. XVI. 152.
Uhehe. Hignle-Plateau (Goetze n. 561) - Februar.
Barlaea calcarata Rchb. f. in Linnaea XLI, 54.
Uhehe. nördl. Utschungwe-Berge auf d. Hignle-Plat. (Goetze n. 568)
Brachycorythis Goetzeana Kränzl. in Engl. Bot. Jahrb. XXVIII, 176
Uhehe. Utschungwe-Berge. bei Dabaggo (Goetze n. 634) - Februar.
Satyrium breve Rolfe in Fl. Trop. Afr. VII, 274.
Uhehe. Utschungwe-Berge (Goetze n. 59) - Februar
Mit dunkel fleischfarbenen, violett gesprenkelten Blt.
Satyrium bifolium A. Rich. in Ann. Sc. Nat. ser. 2, XIV 273 (t. 18 fig. 2.
Uhehe. Matanana-Plat. (Goetze n. 736) - März.
Satyrium trachypetalum Kränzl. in Engl. Jahrb. XXIV, 505.
Süd-Uluguru. (Goetze n. 206) - November - Uhehe, bei Bum-
gembe in 1600 m (Goetze n. 729) - März. 1/2 m hoch, grünl.-gelb. Helm (hellbraun.)
Satyrium Atherstonei Rchb. f. Flora Bd. 64 (1884) 328.
Uhehe. Utschungwe-Berge b. Ndegere um 1000 m (Goetze n. 604)
- Febr. Mit weissen Blt.
369 Satyrium minax Rolfe in Fl. Trop. Afr. VII, 268.
Uhehe. Iringa. Kilima-Plat. 1600 m. (Goetze n. 658) - Februar.
Bis 1/2 m hoch, Blt. weiss, d. aufwärts gekrümmten Gipfel d. Blumen-
bl. an d. Spitze grünlich.

Satyrium Schinzii Dur. & Kränzl. in Kränzl. Gen. et Sp. Orch. I, 696.
Central-Uluguru - Lukwangule, an d. unteren Grenze d. Bambuswälder in Rodungen (Stuhlmann n. 9216) - November.

Disa Carsoni N. E. Br. in Fl. Trop. Afr. VII, 277.
Uhehe - Utschungwe - Berge b. Kiringa im Hochmoor um 2000 m (Goetze n. 575) - Februar. Einh. Name ngomba-gomba. Mit leuchtend rote Blt. Helm violett-punktiert.

Disa sp. ex aff. D. Carsoni N. E. Br.
Uhehe Utschungwe - Berge b. Kiringa auf trockenen Matten in 2000 m (Goetze n. 580) - Februar.

Disa Walleri Rchb. f. Otia II, 105.
Uhehe. Bei Makombe auf Sumpfwiesen um 1900 m. - (Goetze n. 679) - Februar. Einheim. Name mukebuka. ½ m hoch mit krapproten, innen weiss mit dunkelrot gefleckten Blt.

Disa Goetzeana Kränzl. in Engl. Jahrb. XXVIII, 178.
Uhehe. Stat. Iringa bei Ruguro auf rotem sandigen Laterit. in 1500 m (Goetze n. 544) - Februar.

Disa satyriopsis Kränzl. in Engl. Jahrb. XXVIII, 177.
Uhehe. Utschungwe - Berge b. Kiringa, 2000 m ü. M. (Goetze n. 577) - Febr. - Einh. Name mbelewere.

Disa luxurians Kränzl. l. c. (1901) 369. - Tubercidia crassa, obl. caules 60-75 cm altas, crassus, pinguis, foliosus, folia 7-8 e basi lata vaginante lanc. acumin. ad 25 cm lga, ad 4 cm lta in bracteas maximas quā flores semper duplo longiores decrescentia bracteae coloratae lanc. acumin. Sep. dors. excavatū, latius quā longū, lateralia late obl. obt. angustiora, implicata, calcar e medio sepali dors. oriens, genuflexū leviter clavatū, obt. ovariū aequans. Pet. elliptica ipsa et labellū minutissime papillosū labellū

e basi paulo angustiore cuneatū obovatū, omnia apice rotundata anthera brevis erecta, stigma pulvinatū. – Sep. dors. 8–9 m̄ lt. 7–8 m̄ lg., lateralia 1 cm lga, 5–6 m̄ lt. petala et lab. 5 m̄ lg. 2,5 m̄ lt. Flores pallide purpurei, bract. purp.-suffusae, apice intensiorem color.

Central-Uluguru. Lukwangule-Plat um 2400 m ü. M. im Hochmoor (Goetze n. 268) – November.

Sieht aus wie eine ins Kraut geschossene Orchis incarnata. Die Blt. sind im Inneren sehr einfach, die Pet. sind nicht geteilt & damit steht d. Pfl. ausserhalb der habituell sehr ähnlichen abyssinischen Arten. Eine flüchtige Ähnlichkeit ist trotz der aufrechten Anthere mit D. longifolia Ldl. vorhanden.

370. Disa Princeae Kränzl. n. sp. – Specim. imperfectū, adest media pars caulis et infloresc. opt. conservata. Caulis verisimiliter altus, validus, (fragmentū quod adest 8 m̄ diam.), foliis quibusdā obl. obt. decrescentib. deorsum vestitus; spica laxiflora ∞ flora ineunte anthesi 16 cm lga, bract. lanc. acumin. quā flores longiores, infimae 5 cm lgae, 1.5 cm ltae. Sep. dors. a fronte visū late ovato-obl., lateralia obl. paulo longiora, angustiora, omnia obt., calcar infra mediū oriens, porrectū, medio genuflexū, obt., sep. postico cucullato v. conico vix aequilongum. Pet. lin.-lanc. acuta. Lab. etiā angustius lin. acutū, haec inter se aequilonga quā sep. breviora, anthera erecta, stigma crassū pulvinatū. – Flores albi, lilacino-punctulati, sep. 1.8 cm lga, lateralia 5 m̄, dors. 1.3 cm lata, pet. et lab. 1.3 cm lga, pet. 1.2 m̄, lab. vix 1 m̄ lata, calcar 1.7 cm lg. – März.

Uhehe. Auf d. Bergplateau b. Iringa (Frau Hauptm. Magdal. Prince)

Disperis Kerstenii Rchb. f. Otia II. 102

Uhehe. Bei Mufindi, 1850 m ü. M. (Goetze n. 754) Blt. hellviolett, Schlund weisslich.

Disperis nemorosa Rendle in Journ. Bot. (1895) 297.
Uhehe. Kipundi-Berge, in einer Waldparzelle 1900 m ü. M. (Goetze n. 675)
Einheim. Name Kurisi. — Februar.

Pogonia Buchanani Rolfe in Fl. Trop. Afr. VII, 187.
Uluguru-Berge, am Mbakana, im trocken Buschwald in 600 m ü. M. (Goetze n. 352) Einh. Name Kwa — Decemb. — Furchoch m. dicker runder Knolle & gelblich saftgrünen Blt. Lippe an d. Spitze zurückgerollt violett geadert.

Polystachya [cultrata Lindl.] cultriformis Spr.
Uhehe. Utschungwe-Berge b. Kiringa, im Walde 2000 m ü. M. epiph. (Goetze n. 586 — Februar. — Einh.-Name Mirangu.

Polystachya gracilenta Kränzl. in Engl. Jahrb. XIX, 251. 371.
Uhehe. Utschungwe-Berge b. Fikongono. 1700 m ü. M. (Goetze 616) Februar.

Polystachya Kraenzlinii Rolfe in Fl. Trop. Afr. VII, 112.
Uluguru-Berge. Lukwangule-Plateau, im Höhenwald um 2400 m (Goetze n. 298) — November.

Polystachya ionochaeris Kraenzl. n. sp. — Planta parvula dense caespitifica. Pseudobulbi parvi, obl. compressi, 1 cm alti, c. 3/4 cm 7.5 mm lt. bifolii, folia late obl. v. lanc. acuta, apice minute biloba, 2–4 cm lga, 7.5–10 mm lt. scapi 3–4 cm alti, hispidi 1- v. 2flori, bracteae minutae ovatae Sep. dors. obl. acut., lateralia ovato-obl. acuta, mentum perbreve, rotundatum formantia. Pet. e basi lineari lanc. acuta, aequilonga. Lab. sessile late ovato-cordat. 3-lobum, lobi later. semiorbiculares, intermedius triangulus, acutus, callus in medio disco antice liber, vix v. non partitus. Gynost. gracile 1/3 sepali dors. aequans. Flores pulcherrimi albi, margine violaceo-suffusi, sep. 1.6 cm lga, later. basi 8–9 mm lt., pet. 1.3 cm lg. labell. 1.5 cm lg. inter lobos later. 1.2 cm latum. — Novembri.

Süd-Uluguru. Um 1300–2000 m. auf d. höchsten Bäumen der Urwälder (Goetze n. 241). Einh. Name Milamtambega.
Der ostafrikan. Vertreter der P. alpina Ldl. Die Pfl. bildet grosse Polster, über deren Bl. die einzeln od. zu 2 stehenden weissen, violett gerandeten Blt. emporragen. – Vergl. P. melanantha Schl. & 1-flora Schl.

Polystachya Heckmanniana Kraenzl. n. sp. – Caespitosa inter Muscorum et Lichenum strata abscondita. Pseudobulbi abbreviati minuti diphylli, 1 cm alti et fere lati; fol. conduplicata, elliptica biloba utrinq. obt. (folio minore fere orbiculari infraposito) scapo 1–1.5 cm alto v. vix altiore, ut videtur semper 1-floro, ipso et ovario hispido. Sep. dors. ligulatum, acutum, later. ovata, acuta mentum breve didymum formantia. Pet. cuneato-obovata, acuta quam sep. subbreviora. Labelli unguis brevis linearis non ciliatus (ut in P. alpina Lindl.), lamina subquadrata fere pandurata utrinq. et antice leviter repanda & dimidio antico undulata, callus in disco nullus, gynostem. perbreve. Flores extus calvi, lutei, sep. 7–8 mm lga, lateralia basi 5–6 mm lata. pet. 5 mm lga, labelli lamina 6 mm lga, 4 mm lata. – November.
Süd-Uluguru. Im Urwald 1300–2000 m ü. M. epiph. auf den höchsten Bäumen (Goetze 240 u. 240a) Einh. Name Milamtambega.
Steht d. P. alpina am nächsten, durch d. nicht gewimperte Basis der Lab. die Pet. & sonst einige kleinere Abweichungen verschieden.

372 Lissochilus Sandersonii Rchb. f. Otia I. 62.

Uhehe. Utschungwe-Berge b. Fikongono, in einem sumpfigen Tal um 1600 m ü. M. (Goetze n. 618) – Februar. Ein mannshohes Knollengewächs. Blt. aussen violett, innen grünlich.

Lissochilus Wakefieldii Rchb. f. & S. Moore in Journ. Bot. XVI, 136.

Süd-Uluguru. An einem unbewaldeten Abhang. (Goetze 214) Novemb. 3/4 m hohe Pfl. m. gelben Blt. Schlund braun geadert.

Lissochilus micranthus Kränzl. in Engl. Jahrb. XVII, 53.

Ruaha-Fluss, an trockenen Bergabhängen (Goetze 430) Januar. 1 Fuss hoch mit aussen gelben, innen violetten Blt. mit dunklerer Aderung. Sporn innen bläulich.

Lissochilus stylites Rchb. f. Otia I, 61.

Ukehe. Utschungo-Berge, an Abhängen zwischen Adlerfarn bei Mogo um 1600 m ü. M. (Goetze 595) Februar. Einh. Name muvere-vere. 1/2 m hohes Knollengewächs m. violetten, innen gelben Blt. dunkelviolett gesprenkelt.

Lissochilus microceras Rchb. f. Otia II, 85.

Süd-Uluguru, an ein. unbewaldeten Abhang 1000 m ü. M. (Goetze 215) Novemb. Einh. Name Kindia-mungu. 1/4 m hoch. Blt lila m. dunklerer Lippe & bräunlich abschattierten seitlichen Bl.blättern.

Eulophia milanjiana Rendle in Trans. Linn. Soc. Ser. 2. IV, 46.

Süd-Uluguru. An sonnigen, unbewaldeten Bergabhängen (Goetze 171) November. Einh. Name mnyongo. — Ussaramo-Plateau. Auf dürrem Lateritboden d. hügeligen Baumsavanne (Goetze 20) October. Fusshoch. Blt. gelb, Schlund braun, häufig orange.

Eulophia (Orthochilus) sp. verosimil. nov.

Ukehe. Nördl. Utschungo-Berge. Higulu-Plateau, auf Matten in 1800 m ü. M. (Goetze 570) Februar. — Einh. Name: Kinualinfi. Fusshohe Pfl. mit knolliger Wurzel. Blt. schwarzviolett. Waren durch Fäulniss zerstört.

Eulophia Goetzeana Kraenzl. n. sp. — Caulis subterraneus rhizoideus haustoriis lenticelliformib. instructus, caulis floriferus pallidus chlorophyllo omnino destitutus, flaccidus, irregulariter flexus. cataphyllis v. vaginulis 3 a 4 distantib. lax. ochreat. acut. vestitus, ad 40 cm altus (excl. inflorescentia), racemus satis densi- et es floribus thyrsoideus, bract. lanc. acumin. flores non aequantib. ovaria plerumq. superantes, infimae 3 cm, supremae vix 2 cm lgae. Sep. pet. q. subaequalia, omnia lanc. acut. apiculata ave. Lab. simplex obl. obt. basi lineis 4 mox evanescentib. instructum, totus disco papill. minut. densis in series satis obscuras disposit. scaber, margine minute serrulatum, calcar minutum subulatum. Gynost. pro genere satis altum, anthera in apice ipsi aequilongum subcompressum producta. Flores conniventes, sep. pet. q. 1,6 – 1,8 cm lga. pallide lutea, lab. 1,5 cm lg. 6–7 mm lt. luteum, macula purpureo-violacea in fundo. — November.

? Süd-Ulugura. Um 1200 m ü. M. auf einem unbewaldeten Abhang. (Goetze 252) — Eingeb. Name: Konkoge.

? Die Pfl. hat starke Ähnlichkeit mit Eul. galeoloides Kr. sie ist grösser, die Blt. aber kleiner, die Lippe zeigt keine Andeutung einer Teilung, ist am ganzen Rande fein gezähnelt, der Discus überall dicht papillös. Die Farbe d. Blüten ist hellgelb mit einem violetten Fleck im Schlunde. Blattgrün fehlt gänzlich, die Lebensweise ist saprophytisch, vielleicht parasitisch, da die Wärzchen der Rhizome als Haustorien (vielleicht?) zu deuten sind. — Vergl. ausserdem Eul. gastrodioides Schl. (s. S. 76) u. antennata Schl. (s. S. 73)

Angraecum Chilochistae Rchb. f. in Linnaea XX, 678. 373.

Central-Uluguru. Lukwangule-Plat. auf Bäumen der Höhenwälder zwischen Flechten, um 2400 m ü. M. (Goetze 273) - Novemb. — Uhehe. Lofia-Fluss epiph. auf Uferbäumen, 600 m ü. M. (Goetze 436) - Januar. Einh. Name: Lumba-lumba.

Angraecum tridactylites Rolfe in Gard. Chron. (1888) II, 34.

Uhehe. Kipundi-Berge. epiph. auf lichtem, niederen Busch, um 1900 m ü. M. (Goetze 671) - Februar. Einh. Name mgulubeira.

Angraecum aphyllum Thouars Orch. Afr. t. 73.

Ost-Uluguru. Im Gebiet der Vorhügel b. Lukangula, im Ruvu-Uferwald in Felsspalten um 300 m ü. M. (Stuhlmann 8939) - October.

Angraecum saccifevum Lindl. in Hook. Comp. Bot. Mag. II (1836) 205.

Central-Uluguru. Lukwangule-Plat. epiph. zwischen Flechten um 2400 m üb. M. (Goetze 315 u. 315a) - Dezember. — Blt. gelb od. gelblich-grün.

Angraecum sp. aff. A. caffro Lindl.

Central-Uluguru. Lukwangule-Plat. auf Bäumen zwischen Flechten um 2400 m ü. M. (Goetze 271) - Novemb. — Blt. gelblichgrün.

Listrostachys pulchella Kraenzl. n. sp. - Planta parvula, 374.
radices longae, tenues, caulis perbrevis, fol. obovata v. obl.-obt. 3-5 cm lga, ad 1 cm lta, inaequali-biloba, racemi tenues folia patula excedentes, pauciflori plerumq. 2flori, bract. minutissimae triangulae. Sep. ovato-obl. acuta. Pet. subsimilia, paulo latiora, Lab. ochreatum v. extinctoriiforme utrinq. acutangulum, sensim in calcar quam sep. pet. q. duplo longius attenuatum. Gynost. perbreve, rostell. satis lgum bicrure in calcar descendens, glandula transversa, caudiculae satis lgae cruribus rostelli appositae, anthera plana. - Fl. tenerrimi hyalini, 1 cm diam. calcar fere 2 cm longum. - Februar.

Uhehe. Nördliche Utschungwe-Berge. Higulu-Plat. in 1800 m ü. M. im Walde (Götze 573). Einh. Name ugungwe.
Eine ausserordentlich zarte Pfl. Distrock. [illegible] Kraenzl. im Kleinen, aber verschieden ausserdem durch das Labell. welcher eigentl. ganz & gar Sporn ist, wie bei manchen Sarcolabium-sp.

Bulbophyllum Gilgianum Kraenzl. in Engl. Jahrb. XXVIII. 162.
Uhehe. Utschungwe-Berge b. Tongolo. 1800 m ü. M. (Goetze 614) - Februar.

Aus: Hemsley: Biologia centrali americana III, (1883)

248. Polystachya, Hook. Exot. Fl. t. 103. Benth. et Hook. Gen. Plant. III p. 540.
About forty species, mostly in Tropical and South Africa, a few in India and the Malayan Peninsula, and the rest in America.

1 Polystachya cerea, Lindl. Bot. Reg. 1840, Misc. p. 86; Walp. Ann. VI p. 641. — South Mexico, Cordillera of Oaxaca, 5000 to [illegible] (Galeotti; 048) Hb. Kew.

2. P. clavata, Lindl. Bot. Reg. 1842, Misc. p. 61; Walp. Ann. VI p. 642.
Brit. Honduras, Belize (Loddiges cult.) Hb. Kew.

3. P. lineata, Rchb. f. Refg. Bot. II tt. 80 et 87 (var. elatior).
South Mexico and Guatemala (Saunders cult.)

4. P. luteola, Hook. Exot. Fl. t. 103. Walp. Ann. VI p. 639; Griseb. Fl. Brit. W. Ind. p. 628.
Dendrobium polystachyon, Lindl. Collect. Bot. t. 20.

p. 249. Guatemala, Yzabal (Godman & Salvin), Chojoa, near Mazatenango (Bernoulli). — Venezuela; Guiana; West Indies, common. Hb. Kew.
This is so like P. zeylanica, Lindl., as to be scarcely distinguishable.

5 P. masayensis Rchb. f. in Bonplandia, 1855, p. 217; Walp. Ann. VI p. 642, et Beitr. Orch. Centr.-Am. p. 50 (varietates)
Nicaragua, summit of Masaya (Oersted). Hb. Kew.

aaa 2.

Haut-Lomami, 1903, le seul dont nous ayons pu étudier des fleurs), l'inflorescence est à ramifications peu développées à bractées engaînant le rachis jusqu'au sommet; chez le P. striata, l'inflorescence est dense, très ramifiée, à rameaux étalés en tous sens et à bractées engainantes absentes dans la plus grande partie de l'inflorescence. Quant à la forme du labelle nous avons figuré celui du P. latifolia (loc. cit. p. 138), il se différencie par la forte échancrure terminale chez le P. striata. En outre les fleurs du P. latifolia, moins longues et relativement plus larges, sont décrites comme rosées.
Dans leur port ces deux espèces présentent donc un aspect très différent.

Comme nous avons eu l'occasion de le dire antérieurement nous croyons qu'il existe dans la forme du labelle d'excellents caractères distinctifs des Polystachya, malheureusement l'attention n'a pas été suffisamment attirée sur eux.

Uheke .

im Walde

Eine auro

Kleinen,

ganz & g

Bulbo

Uheke .

Ann: Annales du Musée Congo V. Sér. Tome II p. 58-59

Polystachya striata De Wildem. 94a

aff. P. latifolia Nob.; foliis 10-32 cm. longis et 3-4,5 latis apice inaequilongis, subemarginatis; inflorescentia paniculata, bracteata, circ. 2-5 cm. longa et 1,4 cm. lata; bracteis subulatis, 2-3 mm. longis; mento obtuso; circ. 5 mm. circ. longo. Sepalo impari, dorso velutino, 5 mm. circ. longo acuto; sepalis punctato-striatis lateralibus triangularibus, acutis, subapiculatis, 7 mm. longis; petalis linearibus vel oblongo-subspathulatis, 4,5 mm. longis et circ. 1 mm. latis; labello a basi cuneato trifido, circ. 5 mm. longo unguiculato, lacinia mediana apice retundata, crenulato-undulata, apice acuminato recurvata, callo cristato.

Sabuka, 26 février 1905 (Marc. Laurent, no. 527); Rivière Loliva (Marc. Laurent, cultivé au Jardin colonial de Laeken).

Obs. — Cette plante dont nous avons étudié des échantillons d'herbier et un specimen vivant ayant fleuri dans les serres du Jardin colonial de Laeken, rappelle comme on pourra s'en convaincre le P. latifolia que nous avons décrit dans nos „Notices sur des plantes utiles et intéressantes de la Flore du Congo, Vol. I p. 138. Tandis que chez cet dernier, du moins chez le type (Kinumbi,

94b Orchis Beesiana W.W. Smith. in Not. Roy. Bot. Gard. Edinb. (Sept. 1914) VIII, 193.— Species ex affinitate Orchidis Giraldianae Kraenzl. bracteis & florib. minorib. inter alia recedit.— Planta 25–50 cm alta, tuberidiis parv. globoso-oblong. Caulis gracilis substrictus. Fol. pleru̅mq. 3 remota, 6–12 cm lga, 1–1.5 cm lata obl.-lanceolata v. lin.-lanceol. acuta subcoriacea. Scapus supra folia nudus v. bract. foliac. 1–2 praeditus. Spica multiflora (12–20) ± densa, bracteis lanceol. acum. nat. ovariu̅ vix aequantib. viridib. instructa. Sep. 5–6 mm lga, circ. 2 mm lta obl.-obt. reflexa sicut petala rosea. Pet. 5 mm lga 2½ mm lt. ovato-elliptica obtusa. Labellu̅ magnu̅ 8 mm lgu̅ circ. 7 mm lt. profunde trilobu̅, lob. subquadrat. paulo erosul. intermedio vix bilobulo calcari circ. 1 cm lgo recto obtuso, ovariu̅ paulo superante.

Plant of 9–20 inch. Flowers rose.
Stony mountain meadows on the eastern flank of the Lichiang Range. lat. 27°25' N. alt. 11–12000 ft. August 1910. G. Forrest n. 6464.

Gymnadenia calcicola W. W. Sm. l. supra cit. 188. Valde affin. G. pseudo-diphylax Kraenzl. sed caule bifoliato florib. majorib. labello in lobos 3 longos lineares diviso recedit. Forsan variet. speciei citatae.

Tuberidia globosa c. 1 cm diam. Caulis 8–12 cm altus erectus v. curvatus bifoliatus. Fol. prope basin 4–7 cm lga ad 1 cm lata lanceol. v. oblanc. v. linearia obtusa v. acuta. Spica ad 4 cm lga 6–12-flora, bract. ovato-lanc. acuminat. quā flores minorib. ovariu̅ superantib. Sep. c. 7 mm lga oblique

lanceol. subacuta rosea. Pet. sepalis aequilga ~~rosea~~ linearia. Lab. ad 8.5 m̄ lgū basi integrū, deinde 3lobū, lob. linearib. intermedio ad ~~basin~~ 6.5 m̄ lgo. lateralib. c. 5 m̄ lgis; superficie hyalino-papillosa, calcar 5 m̄ lgū incurvulū apice obtusū incrassatū, ovariū 5-6 m̄ lgū.

Plant of 2-5 inch. Flowers rose. On limestone drift on the eastern flank of the Lichiang Range. Sept. 1910 (Forrest 6536)

Pl. of 3-8 inch. Flow. rose fragrant. Dry pasture at north end of the Tali-valley. 7000' Novemb. 1910 (Forrest 7375)

Habenaria Bossiana W.W. Sm. l. supra cit. 189. — Species habitu. fol. inflorescentia Hab. Forrestii Schlechter, differt labello 3fido. — Planta erecta gracilis 20-30 cm alta. Tubera anguste oblongoidea. Caulis basi 2-3-foliat. superne vagin. pauc. acuminat. remotis praeditus teres glaber. Fol. erecto-patentia linear. acut. glabr. 4-8 cm lga, medio c. 2 m̄ lata, spica 7-12 cm lga sublaxe multifl. bract. erectae ovato-lanc. acuminatae ad mediū ovariū pervenientes. Flores in genere inter minores virides. Sep. intermediū erectū ovatū-oblongū circ. 4 m̄ lgū, lateralia deflexa obl. obt. intermedio aequilonga. Pet oblique ovato-lanc. obt. sepalis aequilonga v. paulo longiora. Lab. circ. 5.5 m̄ lgū. glabrū in lobos 3 lineares fere ad basin divisū, lobus intermed. lateralib. paulo longior, c 3.5 ante ostiū calcaris labell. carnoso-incrassatū, calcar cylindricū glabrū incurvulū ovariū aequans v. paulo superans. Ovar. cylindraceū. 5-6 m̄ lgū glabrū. — Flowers green.

Dry openings amongst scrub on the eastern flank of the Lichiang Range — August 1910 (Forrest 6404)

Very near H. Forrestii Schlechter ~~of~~ from the same area.

Listera Wardii Rolfe in Not. Roy. Bot. Gard. Edinb. VIII (1913) 127.

Terrestris 12-18 cm alta. Caulis subgracilis glaber 9-11 cm lgus. Fol. opposita sessilia latissime ovata, brevissime apiculata basi truncata glabra multinervia 3-4 cm lga, 4-5 cm lta. Scapus gracilis puberulus 5-9 cm lgus 5-10-florus, bract. ovatae v. obl. ovatae subacutae 5-7 m̄ lgae, pedicelli 6-7 m̄ lgi. Flores mediocres. Sep. patentia obl. subobtusa 5-7 m̄ lga. Pet. linear. subobtusa 5-7 m̄ lga. Lab. cuneato-obcordatū apice breviter 2lobatū. subcrenatū basi subcordatū 1.3-1.4 cm lgū 9-10 m̄ latū. radiato-venosū, medio obscure carinatū. Col. arcuata subclavata 4 m̄ lga.

China. N. W. Yunnan. Among the undergrowth of the temperate rain-forest, with Oxalis, Arum & Lilies.
Salween-Mekong divide East-slope. 10000 ft. June 1911.
(Kingdon-Ward 149)
Allied to L. grandiflora Rolfe but different by its narrower cuneate obcordate lip. Flowers smaller, leaves broader, stem shorter.

Nervilia tibetensis Rolfe l. supra c. 128. – Tuber subglobosum c. 1,3 cm latū. Folia non visa. Scapi graciles 15-20 cm lgi, vagin. spathac. pauc. obtecti, bract. lin.-lanceol. subobtusae deflexae 7-11 m̄ lgae, pedicelli graciles apice incrassati 4-5 m̄ lgi, ovariū ellipsoideū 3 m̄ lgū. Sep. et pet. subconniventia lanceol. breviter acuminata 1,4-1,5 cm lga. Lab. 3lobū 1.2 cm lg. 1 cm lt. lobi later. semioblongi truncati prominente radio-venosi, lob. intermed. obovato-quadratus emarginatus 4 m̄ lgus, disco 3-seriis Col. clavata. 6 m̄ lga.

Tibet. Chamutang Salwen Riv. 6000 ft. June 1911 (Kingdon Ward 151)
Allied to N. Aragoana Gaud. (Pogonia flabelliformis Lindl.) but with a fewer-flowered inflorescence, more truncate side-lobes to the lip & the column only 1/3 as lg as the sep. & pet.

Cypripedium Wardii Rolfe l. supra cit. 128. – Rhizoma repens radices numerosissimae. Caules erecti 15-20 cm lgi medio v. infra mediū 2phylli basi vagin. spathac. pauc. obtecti. Fol alterna subsessilia elliptica v. lanceol. elliptica sub-ovata, 5-9 cm lga 1,5-3 cm lt. venis numeros. molliter pubescentib. Scapi graciles pubescentes 9-11 cm lgi, 1-flori. bract. ovatae v. ovato-lanceol. pubescentes 2-2,3 cm lgae, pedicelli c. 1 cm lgi dense pubescentes. Flores mediocres. Sep. postic. elliptico-ovatū acutū 1,4 cm lgū 8 m̄ lt. extus molliter pubescens sep. later. connata late ovato-elliptica subobtusa valde concava 1.2 cm lga extus molliter pubescentia. Pet. rhomboideo-oblonga obtusa 1,2 cm lga basi 5-6 m̄ lta. Labell. ovoideo- ~~[illegible]~~ globosū 1.5 cm lgū 8-9 m̄ ltū, lobi laterales late triangulares subobtusi 2-2,5 m̄ lgi. Col. 5 m̄ lga. Staminodiū ellipticū obtusū apice breviter recurvū 3.5 m̄ lgū.
Tibet. Above Salwen Riv. Kun-a-tong, 10000 ft. Growing on limestone cliffs in shade of dense (forests temperate) Extensive root system corresponding to situation. June 1911. (Kingdon Ward 145)
Allied to C. guttatum Swartz but differing in its softly pubescent stems & smaller pubescent leaves, the latter

being 3 in number & not turning black in drying as C. guttatum invariably does. The flowers are also different in shape & texture, the dorsal sep. being broader & less acute & the petals rhomboidly dilated at the ~~apex~~ base. The colour is not recorded on th sheet but the dried specimen shows large purple spots on the lip while the rest of the flower is pale in colour.

New or rare Malayan plants in Journ. Roy. Asiat. Soc. Straits Branch. Decemb. 1907. [N. 49.] by H. N. Ridley.

27. Microstylis aurata Ridl. – Stem 1 in. lg. hardly bulbous. Leav. 6–9 erect narrow lanceol. acumin. inaequilateral narrow; at base into a petiole winged to the base 6 in. lg. 1 wide or narrower. Scapes 1 or 2 slender 6 in., lengthening with flowering to 1 foot. base (about 4 in.) nude except for a few linear bracts 1/4 in. lg. 4-angled. floral bracts lanceol. acum. longer than the pedicels. Flowers very numerous (opening 1 or 2 at a time) about 50. Sep. ovate laterals rather broader than upper one 1/8 in. lg. 3-nerved blunt. Pet. narrower lin. 1-nerved blunt. Lip-auricles very large recurved red ovate-lanceol. acute as large as the rest of the lip, limb obovate narrower at the base & enlarged into 2 rounded oblanceol. lobes, elevated veins at the base between the auricles. Column short with very short arms. Capsule elliptic obl. 1/4 in. lg.

Sarawak: Quop. Flow. yellow, later. lobes of lip red (J. Hewitt)

~~Liparis Downii Ridl. – Stem about 1½ in. lg. Leav. few elliptic-lanc. herbac. 3 in. lg ¾ in. across slightly narrowed to the base acute at the tip. Peduncle slender terete 4 in. lg., bracts lin. acumin. ⅛ in. lg deflexed. Flow. small, ovary & pedicel ¼ in. lg Dors. sep. obl. lin. pale furcous purple, later obl. decurved inaequilateral, green with indistinct purple breaks along the outer edge than the lip. Pet. lin. narrow~~

Diese Ridleysche Arbeit findet sich in Collect. V, 103 – 149.

Journal Linn. Soc. Vol. XLII (1914) 146 – 161.

Orchids of Mt. Kinabalu coll. by Miss L. S. Gibbs. 146.

Microstylis kinabaluensis Rolfe – Rhizoma repens. Fol. petiolata, limbus ovatus acutus submembranaceus 2-4 cm lg. 1-2 cm lt. multinervis, petiol. 1-2 cm lg. basi ample vaginatus. Scapi 7-12 cm lgi, racemi angusti 4-7 cm lgi multiflori. bract. ovato-lanceol. acutae concavae 2-3,5 mm lgae, pedicelli 3-4 mm lgi, flores parvi. Sep. patentia 2,5-3 mm lga, posticū late ovatū, subobtusū, lateralia suborbicularia v. orbicul.-elliptica obtusa. Pet. ellipt. v. ellipt.-obl. obt. 2,5-3 mm lga. Lab. 3,5 mm latū basi profunde sagittato cordat. apice breviter 2lobū, lobi laterales lati subtruncati v. subdenticulati, lob. intermed. transverse obl. obtusiss. v. emarginatus, discus leviter tricarinat. Col. 1 mm lga alis oblong. Capsula obovato-obl. 9 mm lga.

Kinabalu. Penibukan ridge 6000' between Dahobang & Kinitaki rivers in mossy forests. Febr. 4065. Flow. orange.

Closely resembling the Celebes M. cordifolia Rolfe in habit but the leaves are rather longer & less caudate & the pet. & the front lobe of lip much shorter & broader

Ich vermute, dass es in der Diagnose bei der Beschreibung d. Blüte nicht cm sondern mm heissen muss. „flores parvi" wäre sonst sinnlos.

147. Liparis disticha Lindl. Gibbs 4014.
Dendrochilum stachyodes J. J. Smith. – Gibbs 4181.
Dendrochilum grandiflorum J. J. Smith Gibbs 4250.
Dendrochilum (§ Acoridium) Gibbsiae Rolfe. – Pseudobulbi approximati ovoideo-oblongi circ. 2 cm lgi monophylli. Fol. lin.-lanceol. subobtusa 10-20 cm lga 1.2-1.8 cm lata. Scapi graciles suberecti v. arcuati 20-25 cm lgi, racemi 10-15 cm lgi. multiflori, bract. patentes obl.-lanceol. subacutae concavae 2,5-3 m̄ lgae. Pedicelli 2-2,5 m̄ lgi. Flores parvi. Sep. patentia ovato oblga apiculata 3-3,5 m̄ lga. Pet. elliptico-obl. subobtusa v. apiculata. 3-3,5 m̄ lga. Lab. latissime dilatatu, 3lob. 2,5 m̄ lgū 4 m̄ lt. lobi lateral. falcato-oblongi subobt. ampli. lob. intermed. subulat. acut. incurv. minutus, discus prominenter bicarinatus. Col. 1,5 m̄ lga, stelidia e basi falcato-lin. subobtusa incurva. 1,5 m̄ lga.
Kinabalu. Marai parai spur 7000' in mossy forest. Febr. 4037. Epiphyte. Flow. reddish cream with a large brown blotch on the lip.
Near the Philippine D. recurvum Ames but readily distinguished by the broader falcate-obl. side-lobes of the lip & the very minute front-lobe

148. Dendrochilum (§ Acoridium) Kinabaluense Rolfe
Pseudobulbi anguste obl. circ. 2.5 cm lgi monophylli. Fol. lineari lanceol. subacuta 10-15 cm lga 7-9 m̄ lt. Scapi graciles suberecti v. arcuati. circ. 2,5 [2.25] cm lgi, racemi 10-12 cm lgi angusti multifl. bract. patentes obl.-lanceol. acutae subconcavae 2 m̄ lgae. Pedicelli 2 m̄ lgi, flores parvi. Sep. patentia obl. acuta 3 m̄ lga. Pet. obl. v. lanceol. obl. 3 m̄ lga. Lab. late 3-lob. 2.5 m̄ lgū 3 m̄ lt. lobi laterales

petalo-oblongi obt. ampli, lob. interm. subulat. acut. minut. - dorso bicarinat. Col. 1.5 mm lga, stelidia e basi falcato-lin. sub-obtusa incurva 1.5 mm lga.

Kinabalu. Maraiparai spur 7000' in mossy forest Feb. 4085. Flow. yellow with a small brown blotch on the lip.

Closely allied to the preceding but differing in having narrower leav. & racemes, in the narrower more acute sep. & pet. & in the narrower lip with a much smaller brown blotch.

[Auf diese Unterschiede hin allenfalls var. aber keinenfalls nov. sp.]

Dendrobium villosulum Wall. Cat. 2006. Gibbs 4012.

Bulbophyllum kinabaluense Rolfe — Pl. epiphytica. Rhizoma repens radicans epseudobulbosum. Fol. c. 6 cm distantia petiolata, limbus ellipt.-obl. obt. coriat. 4-5 cm lg. 1.6-2 cm lt. petiolus 1.5-1.8 cm lg. Scapi erecti 10-14 cm longi (laxiflori) basi vagin. spathaceis obtecti, racemi 4-8 cm lgi. bract. obl.-lanceol. subacuminat. 3-4 mm lgae, pedicelli 2-3 mm lgi. flor. parvi. Sep. post. lanceol.-obl. acut. cucullato-concav. 6 mm lgum, sep. lat. triangularia subfalcata 6 mm lga, mentum obt. 2 mm lgum. Pet. obl. subobtusa 3 mm lga. Lab. recurvum obl. ~~obt.~~ subobt. subcarnos. 3-nerv. 3.5 mm lgum marginib. infra medium suberect. Col. lata 1 mm lga. dentib. subulatis.

Kinabalu. Above Lobang to Pakapaka in mossy forests. 6000-9500'. Febr. 4252. Flow. yellow. — Near B. coriaceum Ridl. from the same locality but the racemes more slender, the flow. smaller & with much narrower segm.

149.

Bulbophyllum Gibbsiae Rolfe. Pl. epiphyt. Rhizoma repens radicans epseudobulbosum. Fol. subapproximata graciliter petiolata, limbus linear. v. obl.-lin. subobtus. chartaceus 6-9 cm lg. 4-6 mm lt. petiolus 2.5-3.5 cm long. Scapi erecti gracillimi 9-10 cm lgi basi vagin. spathac. v. tubulos. obtecti; racemi 5-6 cm lgi laxiflori.

bract. obl-lanceol. subacutae 1.5-3 m̄ lgae. Pedicelli 1.5-2 m̄ lgi. Flores minuti. Sep. subconniventia 4 m̄ lga. postic̄ obl.-lanceolat. acut. concavū, later. 2angula subfalcata acuta concava, mentū obtusū 1 m̄ lgū. Pet. obl. subobt. 2 m̄ lga. Lab. recursū elliptico-obl. obtusū. 2.5 m̄ lgū obscure bicarinatū, marginib. infra mediū suberect. Col. lata 0.5 m̄ lga dentib. subalatis.

Kinabalu. Penibukan ridge 6000' in mossy forests Febr. 4059. Also on the Maraiparai spur. Epiph. Flos. white.

Very distinct among the Malayan Ebulbosae by the numerous narrow leav. & very slender petiole.

Eria (§ Eriura) cymbidifolia Ridl. in Journ. Bot. 36(1898) 212.
Kinabalu. Gurulau. Gibbs 4009.

Eria grandis Ridl. in Trans. Linn. Soc. Ser 2. IV.(1894) 237.
Kinabalu. Pakapaka 9500-10500'. Gibbs 4268.
Ist von mir mit guten Gründen zu den Pteridostachya gestellt, wo Rolfe anficht, der sie zu den Eriura stellt.

150. Eria (§ Eriura) villosissima Rolfe. — Terrestris 1 m alta. Caul. cylindrici foliosi. Fol. elongato-lin. acuta arcuata 20-30 cm lga, 1-1.8 cm lt. coriacea. Scapi terminales fasciculati, circ. 10, bruneo-villosissimi c. 20 lgi, racemi densiflori, bract. lanc. acumin. c. 4 m̄ longae. Pedic. 8 m̄ lgi bruneo-villosiss. Flor. parvi bruneo-villosiss. Sep. postic. ovato-obl. subobtus. concavū 4 m̄ lgū, sep. later. late triangulari-ovata subobt. 4.5 m̄ lga 3 m̄ lt. mentū recurvatū 2 m̄ lgū. Pet. spathulato-elliptica subobt. membranac. 4 m̄ lga. Lab. 3lobū breviter unguiculat. 5 m̄ lgū 3.5 m̄ lt. lobi later. oblongi apice 2lobi, lob. intermed. ovatus subobtus. apice callo magno erecto verrucoso instruct. discus leviter 3carinat. basi callo obl. erecto v. subsaccivo instruct. Col. lata 1.5 m̄ lga.

Kinabalu. Maraiparai spur 7000' in mossy forest. Febr. 4090.
Flowers brown with a cream coloured & spotted lip.

Nahe verwandt mit E. major Ridl. in Trans. Linn. Soc. S. 2 IV 237 in oppon. unterschieden durch schmalere Bl. kürzere Blt-schäfte & -Stiele, schmalere Seabl. breitere Pet. u. alle Einzelnheiten der Lab. Dagegen ist die malayische E. major Ridl. (E. Kingii Hook. f. Fl. Brit. Ind. V, 790 & Ic. Pl. t. 2066 von F. v. Mueller) von der bornens. Pfl. verschieden, sie hat kürzere Bl. weniger Blütenstände, welche weichhaarig-weiss sind, ebensolche Blt. stiele & kleinere Blt. nebst ganz verschied. Labell. – Rolfe nennt sie E. Ridleyi Rolfe

Eria (§ Aeridostachyae) borneensis Rolfe. – Terrestris erecta 45–60 cm alta. Pseudobulbi ovoideo-obl. c. 12 cm lgi, apice 2 phylli. basi vagin. conduplicat. imbricat. suprem. foliat. obtecti. Fol. lanceol. elongata acuta, basi longe attenuata coriac. c. 45 cm 3–4 cm lt. Scapi axillar. c. 45 cm lgi, racemi elongati densiflori 25–30 cm lgi, rhachis dense fusco-velutina, bract. late ovatae 1.5 mm lgae. Pedicelli dense fusco-velut. 1.5 cm lgi, flores parvi dense fusco-velut. Sep. postic. ovato-oblong. obtus. inconspic-concavum. 3 nervium. 3,5 mm lgum. sep. lat. late ovato-triang. obt. 3 mm lga, mentum obl. obt. 4 mm lgum. Pet. falcato-obl. obt. 3–3,5 mm lga. Lab. integrum elliptico-obl. obt. crenulatum 5 mm lgum, discus 5-nervis. Col. lata 1.5 mm? lga [Soll wohl mm heissen?]

Kinabalu. Kiau 3000' undergrowth in sec. forest. Febr. 3955. Fl. brown. Allied to E. aeridostachya Rchb. but the lips more crenulate & apiculate the leav. & inflorescence much longer.

151.

Eria (§ Aeridostachyae) kinabalensis[x)] Rolfe – Epiphytica. Caules cylindrac. incrassati 10–11 cm lgi, basi vagin. conduplicat. obtecti. apice 2–3-phylli. Fol. lanc. ~~li. anguste~~ obl. oblonga ~~lanceol.~~ coriacea subacuta, ~~12–18~~ 20–25 cm lga, ~~4–1.3~~ 1.5–3 cm lt. ~~5–7-nervia~~ basi attenuata. Scapi ~~###~~ axillar. subrecti 25–30 cm lgi, ~~foliorum & vaginarum superiorum producti 4–5 graciles 8–12 cm lgi glabri laxifl. multifl., bract. ovato-lanc. acutae 3–4 mm lgae. pedicelli gracil. glabri 6–8 mm lgi flores parvi glabri. Sep. subconni~~ fusco-puberuli, vagin. ovat. acut.

x) Wohl ~~das~~ nur Druckfehler statt kinabaluensis.

pauc. obtecti, racemi arcuati v. subnutantes $\frac{8}{8}$-11 cm lgi densiflori. bract. ovato-obl. subobt. 1.5-2 cm lgae, pedicelli furco-puberu-ler 5-6 mm lgi. flores parvi extus furco-pubescentes. Sep. postic. late ovat. obt. concav. 4 mm lgu, sep. lat. late triangulari-ovata, obt. 5 mm lga. mentu clavato-obl. obt. 4 mm lgu. Pet. falcato-obl. obt. membranacea 3.5 mm lga. Lab. sub 3lobu 5 mm lgu, lobi later. obl. apice obtusi, lob. intermed. late ovat. apiculat. undulat. 2 mm ltus. discus laevis. Col. lata 1.5 mm lga.

Kinabalu. Panapaka cave 10000' undergrowth in scrubby for. Febr. 4302. & below Panap. 9000' epiphyt. in low forest. Feb. 4227 Fl. brown. — Allied to the Javan E. acuminata Ldl. but having longer more slender scapes broader leaves & much broader sep.

Eria (§ Hymeneria) Gibbsiae Rolfe — Epiphyt. Rhiz. valido vagin. ovat. striat. imbricat. obtectu. Pseudob. suberecti cylindrici, plus. articulati glabri 15-20 cm lgi. vagin. spathat. obtecti ad apice 3-4 phylli. Fol. lanceol. v. anguste obl.-lanc. subacuta 12-18 cm lga, 1-1.8 cm lt. 5-7-nervia. Scapi ex axill. folior. & vaginar. superioru pro-ducti 4-5, graciles 8-12 cm lgi glabri laxiflori multiflori. bract. ovat. lanceol. acutae 3-4 mm lgae. pedic. graciles glabri 6-8 mm lgi. Flor. parvi glabri. Sep. subconniventia 6 mm lga, postic. obl.-lanceol. acuta sub-concavu, later. subfalcato-lanc. acuta, mentu subsaccatu obt. 1 mm lgu. Pet. lin.-lanceol. acuta 5 mm lga. Lab. ovato-lanceol. acut. subconcavu 2.5 mm lgu, discus 3-nervis. Col. lata 1 lin lga.

Kinabalu. Kiau 3000' in sec. jungle. Febr. 3960. Flow. yellow. Allied to E. tenuiflora Ldl. but having taller stems, lger leav. & much narrow sep. & pet.

152. Eria (§ Trichotosia) ferox Bl. Mus. Lugd. Bat. II. 184.
Kinabalu. Panapaka 9-10000'! Febr. 4279. Fl. brown.

Eria (§ Trichotosia) rubiginosa Bl. l.c. 184.
Kinabalu. Gurulau spur 5500'! 4016 (wahrscheinlich)

Eria (§ Trichotosia) pilosissima Rolfe. — Epiphytica 75-100 cm alta. Caules cylindrici subgraciles rufo-pilosissimi pil. 4-5 m lgis. Fol. sessilia lanc. acuminatiss. utrinq. pilosa 10-12 cm lga 1.5-1.8 cm lt. Pedunculi 4-5 cm lgi rufo-pilosiss. graciles 4-5-flori, bract. obl. lanc. acutae pilosae 7-8 m lgae. pedic. 5 m lgi pilosiss. flores mediocres extus rufo-pilosi. Sep. post. elliptico-obl. obt. 7 m lgū, sep. lat. oblique 3angula obt. 8 m lga. mentū obl. 7 m lgū. Pet. elliptico-obl. obt. 6 m lga. Lab. unguiculatū, limbus 3lobus 5-6 m lgus, lobi later. semiovati obtusi c. 2 m lati, lob. intermed. suborbicularis crenulatus 2lob. 3-5 m lt. lob. obtusiss. discus bicarinat. carin. verrucos. unguis 4 m lgus. Col. clavata 3 m lga.

Kinabalu, above Lobang 6000' high forest. Febr. 4117. Flow. cream with red tomentū.

Allied to E. ferox ~~Wall~~ Bl. Differs in having more slender stems with longer hairs narrowly lanceol. leav. & a more deeply lobed lip.

Phreatia densiflora Ldl. Gen. & Sp. Orch. 64.

Kinabalu. Above Lobang 5000'. Febr. 4122 & in high forests 6000' 4123. Flow. white.

Phreatia (§ Euphreatia) monticola Rolfe. — Epiphytica caespit. ebulbosa 8-11 cm alta. Caules 2-3 cm lgi, vagin. folior. imbricat. obtecti. Fol. disticha 6-8 lin. obt. arcuata 6-8 cm lga 2-3 m lt. vagin. conduplicat. imbricat. striat. 8-10 m lgis obtecta. Scapi axillares suberecti 4-6 m lgi, racemi 2-3 cm lgi. bract. 3-4 m lgae basi ovato-obl. apice longe setaceo-acuminatae. pedic. 1-1,5 m lgi. flores minutiss. Sep. subpatentia late triangul.-ovata subacuta vix 1 m lga. later. in mentū breve rocevatū producta, Pet. ~~##~~ ovato-obl. obt. vix 1 m lga. Lab. subsessile orbiculare 0.75 m lgū. Col. minutissima.

Kinabalu. Kiau 3000'. Febr. 3959. Epiph. growing in large bunches Flow. white.

Near P. secunda Ldl. but having rather longer more spreading leav. longer more setaceous bracts, broader pet. & an orbicular lip.

153. Spathoglottis aurea Ldl. in Journ. Hort. Soc. V (1850) 34.
Kinabalu. Kiau 3000'. Febr. 3957.
The front-lobe of the lip is narrowly lanceol. linear as in Ldl. type not broadly dilated as in the follow. which has been confused with it.
Spathoglottis gracilis Rolfe in Bot. Mag. 7366.
Kinabalu. Dapatan. Maraiparai spur 5000'. Febr. 4076.
Phajus Blumei Lindl. Gen. & Sp. 127.
Kinabalu. Tampunan plain 2000'. Febr. 3003.
This has been more or less confused with P. Wallichii Ldl. but the spur is much shorter in that & sep. & pet. invariably white at the base.
Mischobulbum scapigerum Rolfe in Orch. Rev. (1912) 127.
Nephelaphyllum scapigerum Hook. f. Bot. Mag. t. 5390.
Tenom hills above 2000', in high forest. Jan. 2884. Terrestrial. Leav. 2 shades of green. Fl. light brown with purple veins on the lip. Only known from the above-cited fig. with which Miss Gibbs's specimen agrees well except in having larger leaves.

154. Arcotainia x) borneensis Rolfe — Herba terrestris. Tuber depresso-ovoideū 1.5 cm latū. Fol. suberecta longe petiolata, limbus elliptico-lanceol. acuminat. plicat. 25–30 cm lgus 2,5–4 cm lt. petioli graciles 20–25 cm lgi. Scapi erecti graciles 45–60 cm alti, vagin. spathaceis pauc. obtecti, racemi 18–30 cm lgi laxiflori. bract. lin.-lanceol. acumin. 5–8 cm (? mm?) lgae. pedicelli graciles 1.5 cm lgi, flores parvi. Sep. lanceol. acuta 1.3 cm lga. Pet. lanc. acumin. 1.3 cm lga. Lab. obovat. sub 3lobū subacutū membranac. subundulatū 1.3 cm lgū. 7–8 mm lt. discus prope apicē 3 carinatus calcar obl. obt. incurvū 3 mm lgū. Col. clavata 1 cm lga late alata.
Kinabalu. Kiau 3000', in undergrowth in jungle. Febr. 3958.
Allied to A. penangiana Ridl. but more slender & with smaller flowers.

x) Arcotainia Ridl. Gatt. diagnose i. Ridl. Fl. Mal. Penins. I (1907) 115.

Agrostophyllum sp. Wiegewöhnlich nur mit Kapseln.
Maraiparai spur 7000'. Febr. 4034. Epiphyte with white flowers.

Coelogyne Sanderiana Rchb. in Gard. Chron. (1887) 764.
Kinabalu. Kiau, bridle path to Koung 2500' terrestrial in jungle Febr. 3971. Flowers white with the disc of the lip yellow, streaked with brown, fragrant.

Coelogyne Dayana Rchb. in Gard. Chron. (1884) I. 826.
Kinabalu. Koung. 1000' forest. Febr. 4339. Inflorest. 1 m lg & brownish cream-coloured flowers.
Quite distinct from C. tomentosa Ldl. & Massangeana Rchb. both of which have been confused with it. C. Dayana Ridl. Mat. Fl. Mal. Penins. (excl. var. Massangeana Ridl.) is C. tomentosa Ldl.

Coelogyne papillosa Ridl. in Trans. Linn. Soc. Ser. 2, IV (1894) 238.
Kinabalu. 8000–9000' open scrub on the serpentine ridge. Febr. 4261. – Flow. white.

155.

Coelogyne exaltata Ridl. in Journ. Asiat. Soc. Straits Br. (1908) 29.
Kinabalu. below Pakapaka 9000'. Terrestrial in open scrub abundant under Leptospermum. Febr. 4215. Flow. white.

Chelonistele lurida Pfitz. in Engl. Pflanzenr. Orch. Coelog. 138
Kinabalu. Maraiparai spur 7000'. Febr. 4095. Flow. brown.

Sigmatochilus Rolfe. gen. nov. (Pl. 3)

Sep. subaequalia subpatentia libera. Pet. subpatentia sepalis angustiora. Lab. ad basin columnae sessile, basi incurvum et saccato-naviculare medio subito recurvum & in limbum subpanduratum extensum; limbus basi bicarinatus, saccus graciliter bicarinatus. Col. erecta apoda brevis, basi alata, apice in alas oblongas amplas dilatata. Anthera intra marginem clinandrii affixa opercularis incumbens 2-locularis. pollinia 4 cerea obl. subcompressa per paria in loculis segregata, apice

appendice granulosa connexa. — Herba terrestr. caespitosa rhizomate longe radicante. Pseudobulbi ovoideo-obl. monophylli. Fol. petiolata elliptico-obl. coriacea. Scapi terminales. Flor. mediocres laxe racemosi, bract. lanceol. subdeciduae.

Sigmatochilus kinabaluensis Rolfe sp. unica. — Pseudobulbi ovoideo-obl. 2.5–3 cm lgi, basi vagin. ovat. imbricat. obtecti monophylli. Fol. petiolata, limbus elliptico-obl. acut. coriaceus 5–8 cm lgus, 1.5–2 cm lt., petioli 2–4 cm lgi. Scapi erecti 7–10 cm lgi, racemi 2.5–3 cm lgi distichi laxiflori, bract. lanceol. acutae concavae 1–1,3 cm lgae, pedicelli 6–7 m̄ lgi. flores mediocres: Sep. postic. elliptico-obl. obt. cucullato-concavū 1 cm lgū. sep. lat. subpatentia obl. obt. 1 cm lga. Pet. lineari-obl. subobt. 9 m̄ lga. Lab. sepalis fere aequilongū, hypochiliū navicularē 4 m̄ lgū, epichiliū subpanduratū subacutā subconcavū 6 m̄ lgū, basi bicarinatū. Col. clavata 5 m̄ lga basi alata apice in alas oblongas emarginatas dilatata.

Kinabalu. below Pakapaka 9000' terrestrial in open scrub on serpentine. Febr. 4260. Flow. white.

A very curious plant of the Coelogyne group closely resembling Gymnoglottis J. J. Smith in habit but differing in having the lip free from the column & strongly sigmatoid in shape the latter character being commemorated in the generic name.

A. Flower B. Labellum C. Part of same D. Column.
E. Anther F. Pollen masses.

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156. <u>Calanthe Gibbsiae</u> Rolfe. — Terrestris. Fol. petiolata, limbus elliptico-oblanceol. abrupte acumin. 5-nervis 20-25 cm lgus. 6-9 cm lt. basi attenuat. petiolus 7-8 cm lgus. Scapi 75-90 cm lgi vagin. spathac. pauc. obtecti, racemi 3-12 cm lgi densi multifl. rhachis puberula. bract. ovatae v. ovato-lanceol. acumin. recurvae 5-10 mm lgae. pedicelli gracil. 2.5-3 cm lgi. Flor. mediocres. Sep. patentia elliptico-obl. abrupte acumin. 1.3 cm lga. Pet. obl.-lanceol. acuta v. acumin. 1.1 cm lga. Lab. columnae adnat, limb. 3-lob. 1.3 cm lgus, lobi later. late auriculati 6-7 mm lgi. lob. intermed. divaricate bilob. basi angust. 8 mm lgus. lob. cuneato-obovat. truncat., discus basi ~~[illegible]~~ tuberculat. calcar gracillim. c. 2 cm lgum apice incurvum. Col. clavata 7 mm lga.

Tenom, hills above 2000' undergrowth in high forest. 2870. Abundant. Flow. white with yellow processes at the base of the lip.

Allied to <u>C. veratrifolia</u> RBr. aber in allen Teilen schlanker

<u>Calanthe kinabaluensis</u> Rolfe — Terrestris. Fol. petiolata, limbus ellipticus acut. plicat. 3-5-nervis 20-25 cm lgus 6-8 cm lt. petiol. c. 10 cm lgus. Scapi 50-60 cm lgi; subgraciles vagin. spathac. pauc. obtecti, racemi 12-15 lgi subdensi multiflori rhachis puberula, bract. lanceol. acumin. 6-13 mm lgae. pedicelli c. 2 cm lgi, flores parvi. Sep. postic. obl.-lanceol. subacut. concav. 9 mm lgum, sep. later. elliptico-obl. subobt. 1 cm lga. Pet. lanceol. obl. subacuta 9 mm lga. Lab. columnae adnat. breviter unguiculat. limb. 3-lob. 7 mm lgus, lobi later. elliptico-obl. obt. divergentes 4-5 mm lgi, lob. intermed. suborbicul. ad medium 2 lobus 5 mm lgus. lob. elliptico-obl. obtus. discus basi tuberculat. calcar obl. obt. leviter incurvum 6 mm lgum. Col. lata subvillosa 4 mm lga.

<u>Kinabalu</u>. <u>Lobang</u> 5000' undergrowth in primary high forest common. Febr. 4108. Flow. orange yellow

Allied to <u>C. flava</u> Morren but the divis. of the front lobe broader, not diverging & the spur shorter & stouter.

157.

Eulophia macrostachya Ldl. Gen. & Sp. Orch. 183.
Ridge above Bundu Tuhan, 2500' Jungle. 4318. Flor. yellow with purple stripes on the lip. – Rolfe erkennt keinen Unterschied zwischen dieser Art u. E. pulchra Ldl. von den Mascarenen.

Eulophia squalida Ldl. Bot. Reg. (1841) Misc. 77.
Standort der vorigen Art. Febr. 4319.

Arachnis Hookeriana Schlechter in Fedde, Repert. X. 197.
Renanthera Hookeri Rchb. Xen. II. 42 t. 113.
Arachnanthe alba Ridl. Trans. Lin. Soc. ser 2 III, 369.
Tambunan plains near the station 2000'. 3004.
Schlechter has separated the Bornean & Malay Penins. plant, but they appear to be identical (ganz meine Ansicht!)

Phalaenopsis amabilis Bl. Bijdr. 294 t. 44.
Tenom 700-900 m. Jan 2704.
Probably the N. E. Queensland Ph. Rosenstromii Baily is not distinct.

Trichoglottis kinabaluensis Rolfe. – Epiphytica c. 20 cm alta, internodia 2.5 cm lga. Fol. lanceol. v. obl. lanc. inaequaliter bidentata coriac. 9-12 cm lga 1-1.3 cm lt. dente superiore acuto. Flor. lateral. fasciculati pauci, rhachis brevissima, bract. squamatae brevissim. pedicelli gracil. c. 1 cm lgi. flores parvi. Sep. obl. obt. 8-9 m̄ lga. Pet. lin. obl. obt. 8-9 m̄ lga. Lab. 3 lob. lobi later. linear. obt. ~~[illegible]~~ recurvi 3 m̄ lgi, lob. intermed. unguiculat. limbus lato ovat. obt. sulcarinat. 5 m̄ ltus. unguis 2 m̄ lgus, calcar obl. obt. 4 m̄ lgū. Col. clavata 4 m̄ lga. Caps. 3 cm lga, pedicell. 1.3 m̄ lgo.
Kinabalu. Gurulau spur above Kiau 5500', in high forest jungle Febr. 3993. Epiphyte with brown flowers
Much resembling Tr. quadricornis Kurz in habit but the leav. rather more elongate & the lip quite different. Probably allied to Tr. calcarata Ridl. but readily distinguished by the broad reflexed unguiculate ~~lip~~ front lobe of the lip & the shorter spur.

158. Vanda Gibbsiae Rolfe — Epiphyt. 1 m alta. Fol. disticha unus recurva line-obl. inaequaliter & acute biloba 15-17 cm lga. 1.7-2 cm lt. Racemi axillar. 5-7 cm lgi 2-4-flori, bract late ovat orbicul. obt. concavae 3-4 m̄ lgae. pedic. 5-6 m̄ lgi, flores speciosi Sep. patentia cuneato-obovata obt. undulata c. 2.5 cm lga 1.2-1.4 cm lt. basi angusta. Pet. subsimilia. Lab. profunde 3lobā, lobi lat. oblique semiovata obt. 8 m̄ lga subconcava, lol. intermed. subereot. carnosiss. subcompress. 1 cm lgus basi angust. carinis 2 divergentib. puberscentib. instructus, deinde abrupte inflex. suborbicul. subcompress. 5 m̄ lgus concav. 3-carinat. calcar conico-obl. obt. 8 m̄ lgū intus puberscens. Col. lata 6 m̄ lga alis rotundat. integris. Caps. obl. angulata 6 cm lga. pedicelli 4-4.5 cm lg.

Kinabalu Kian 2500' bridle path to Koung. in forest. Febr. 3970. Flow. yellow spotted with brown.

Comparable with V. celebica Rolfe. Shorter regularly curved leav. & flowers larger. approaching V. 3color Ldl. & like it turns black in drying.

Sarcolabium kinabaluense Rolfe. — Epiphytic. Caulis erect. c. 6 mm (? cm ?) lgus. Fol. 5 obl. v. elliptico-obl. inaequaliter 2loba. obt. 6-11 cm lga 2-2.5 cm lt. coriac. Racem. elongat. gracilis c. 22 cm lg. lax. multiflor. bract triangul. acutae 1.5-2 cm (? m̄ ?) lgae pedic. graciles 5 m̄ lgi, flor. parvi. Sep. postic. ovato-obl. subobt. inaeq. & valde concavū 4 m̄ lgū, sep. later. late ovata obt. 3 m̄ lga. Pet late ovata obt 3 m̄ lga. Lab. profunde 3lob. lobi later. triangulari-obl. obtusi erecti 2 m̄ lgi, lol. intermed. subulat. acut. erect. 1.5 m̄ lg. calcar late obl. obt. prope basin oblique inflata paulo recurvū 6 m̄ lgū. Col. lata 2 m̄ lga alis lat. rotundat.

Kinabalu. Lobang 5000' high forest. Febr. 4111. Flow. yellow, lip white. Characterised by the slender elongated racems & relatively large spur.

Podochilus serpyllifolius Ldl. Journ. Lin. Soc. III (1858) 37.
Kinabalu 5000-6000'. Febr. 4060. Epiphyte with white flowers.

Appendicula congesta Ridl. in Trans. Lin. Soc. Ser 2, IV (1894) 239.
Kinabalu. 6000' Febr. 4058. Epiphyte, flow. white.

Appendicula rupicola Rolfe comb. nov.
Podochilus rupicola Ridl. in Journ. R. A. Soc. Straits Br. N. 50, 142.
Kinabalu 1000' Febr. 4301. - Fruiting specim.

Appendicula torta Bl. Bijdr. 303.
Hills around Tenom 1000-3000' in high forest cotton Jan. 2897.
Epiph. with white flowers. A form with slender stems & rather smaller more numerous leaves.

Goodyera kinabaluensis Rolfe. — Herba terrestr. c. 15 cm alta. Fol. radicalia 3-4 breviter petiol. limbus lateovat. subobt. v. apiculat. velutin. atro supra atroviridis, pulchre carneo-venos. 4-5 cm lg. 2.5-3.5 cm lt. petiol. lt. 8-11 m̄ lg. basi ample vaginatus. Scapi puberscent. 10-12 cm lgi, vagin ovato-lanc. obtecti, racemi brev. pauciflori, bract. ovato-lanc. acumin. puberscent. 1-1.2 cm lgae, pedicelli 1.5 cm lgi, flor. mediocres extus puberscent. Sep. post. elliptico-ovat. subacut. 1.1 cm lgū, sep. lat. subpatentia elliptico-ovata subacuta 1.1 cm lga. Pet. lanceol.-obl. subacuta c. sepalo postico galeā valde concavā formantia. Lab. ovato-ellipticū subacutū valde concavū laeve 1.1 cm lgū. Col. lata 7 m̄ lga angulis marginat. supra dilatato-falcatis.

Kinabalu. Gurulau-spur above Kiau ridge 5000-5500' in primary forest. Febr. 3997. 4003. — Leav. veined with pink. Flow. cream pinkish outside. — Characterised by the broadly acute veined leav. & the winged margin of the col. The veins of the lip 7-9 connected by transverse veins giving the plant an Anaectochilus-like appearance.

160. Platanthera (§ Mecosa) Stapfii Kraenzl. Mss. – Terrestr. 40–45 cm alta. Fol. radicalia elliptico-ovata acuta 6 cm lga 2 cm lta subcoriacea. Scapi 40–45 cm alti subgraciles vagin. spathac. acuminat. obtecti, racemi 9–11 cm lgi pauciflori, bract. ovat. subacutae 1–1,5 cm lgae subcoriaceae, pedic. 1.5–2 cm lgi. flor. mediocr. Sep. postic. ovat. obt. 7 mm lgu, sep. later. patentia oblique ovata subobtusa 7 mm lga. Pet. oblique ovata acuta c. sep. post. galeā formantia. Lab. integrū deflexū ovato-lanceolat. obt. carnosū 1 cm lgū, calcar clavatū paullo incurvū obt. 1,2 cm lg. Col. latiss. 3 mm lga.

Kinabalu. 5000' Marai parai (Haviland without n.)

Differs from the Javan Pl. Blumei Ld. in its more slender stems, laxer infloresc. & in some respects also in its floral structure.

Platanthera (§ Mecosa) kinabaluensis Kränzl. Mss. – Terrestr. c. 48 cm alta. Fol. radicalia desunt. Scap. erect. c. 48 cm alt. vagin. spathac. acuminat. obtectus, racem. 10 cm lgus subdensus multiflor., bract. ovatae v. ovato-lanceol. acumin. subcoriaceae 1.8–2,3 cm lgae. pedic. 1.2–1.5 cm lgi. flor. mediocr. Sep. postic. late ovatū obt. 7 mm lgū. sep. later. patentia oblique ovata obt. 8–9 mm lga. Pet. oblique ovata obt. c. sep. post. galeā formantia. Lab. integrū deflexū lin.-obl. obt. subcarnosū 1 cm lgū, calcar subclavat. paulo incurvū 1.3 cm lgū Col. latissima 4 mm lga.

Kinabalu. (Haviland)

Allied to Pl. Stapfii Kr. but the stem stouter, the infloresc. denser & the flow. larger. The origin. ticket has been lost, so that the altitude & number cannot be stated.

Platanthera (§ Mecosa) Gibbsiae Rolfe – Terrestris c. 50 cm alta. Fol. radicalia spathulata, limb. elliptico-obl. subobt. 5 cm lgus 1.8 cm lt. subcoriaceus, petiol. 3 cm lg. Scap. erect. c.

50 cm alt. ~~Sp~~ vagin. spathac. acut. numeros. obtectus, racem. 16 cm lgus angust. multiflorus, bract. ovat. v. lanceol. ovatae acutae subconiac. 1.3-2 cm lgae, pedic. 1,2-1,5 cm lgi. flor. mediocr. sep. postic. ovat. subacut. concav. 6 m̄ lgū, sep. later. patentia oblique et anguste ovata subobt. 8 m̄ lga. Pet. oblique ovato-obl. subacuta c. sep. postico galeā formantia. Lab. integrū deflex. lin.-obl. subobl. carnosū 1 cm lgū, calcar subclavatū paulo incurvū 1 cm lgū. Col. latiss. 3 m̄ lga.

Kinabalu. below Pakkapaka 9000' open scrub. Febr. 4258. Flow. yellow. — Allied to Pl. kinabaluensis Rr. but the flow. rather smaller, the sep. narrower & the spur not exceeding the limb of the lip.

161.

Cordula Dayana Rolfe in Orch. Rev. 1912. 2.

Paphiopedilum Dayanum Pfitz. in Engl. Jahrb. XIX (1894) 40.

Kinabalu, Koung forest. Febr. 4347.

Paphiopad. Pfitz. (Morph. Stud. Orchid. blt 11) was based on the Selenipedia acaulia coriifolia Reichbf. Xen. Orch. I, 3 (a group of 7 Tropic. Americ. spec.) but was afterwards extended (Engl. Jahrb. XIX, 40) to include the whole of the Trop. Asiatic species. The 2 groups are generically distinct, for the latter Rafinesque's genus Cordula is half a century earlier. Cordula insignis Rafin. Fl. Tellur IV, 46 was based on Cypripedium insigne Wall. in 1836.

Tropidia grandis Hance in Journ. Linn. Soc. XIII (1873) 128. — Glaberrima. fol. elliptico-lanceol. acut. 7-nerv. 8-10 poll. lg. medio 2½ poll lt., pedunculo robusto 10-pollicari, vagin. 3 aphyllis scarios. lanceol.-linearib. instructo apice corymbosa. florib. pollicarib.

bract. lato-linearib. scarios. ovariis subaequantibus.
Fl. Hongkong. - In the happy-valley woods. (July 66, exs. 13343)
Not known from elsewhere. Differs much in habit & aspect from
T. ouronligoides Ldl. by its long vaginate peduncle, large
flowers & leaves like those of a Phajus. Schauer's plant of
his Ptychochilus 7-nervis (Pl. Meyen. t. 12 B) which is a native
of the Philippines, represents a distinct plant & though with
wider leaves, doubtless much nearer the Ceylon & Sylhet ~~plant~~
species than the present.

Miss Gibbs contribution to the Montane Flora of Fiji.
Vol. 39. Journ. Linn. Soc. N. 271 (Octob. 1909) 173 & folg.
173. Microstylis vitiensis Rolfe - Caules breves, vix incrassati.
Fol. petiolata, ellipt.-lanceol. acuta, 5-7-nervia membranacea,
limbus 6-13cm lg. 2-3,5 cm lt., petiolus 2-3cm lg. vaginatus. Scapi
erecti subgraciles 15-20 cm lgi, bract. patentes lanceol. v. ovato-
lanceol. acut. v. acuminat. 4-5cm lg (4-5 m) lgae, pedicelli graciles
3-4 m lgi. Sep. libera ellipt.-oblonga, obt. 3-nerv. 4 m lga. Pet. lin.
obt. 1-nervia, 4 m lg. Lab. 3lob. 5-6 m lt., lobus interm. quadratus
obtusiss. infra 1 m lg., lobi later. ellipt.-obl. utrinq. obt. 3,5-4 m
lgi. discus callo transverso arcuato instructus. Col. 1 m lga, alis
obtusis. Caps. pedicellatae, obovoideae, hexagonae, 1 cm lgae
costis undulatis. - Fl. orange-green.
Col i Nadarivatu, 3500, in moss forest. Fl. & Fr. Sept. 653.
Differs from M. platychila Rf. in its narrower leaves, shorter inflorescence
& in the structure of the flowers.

Dendrobium sertatum Rolfe – Caules elongati, an- 174.
gulati, foliat. 45-60 cm lgi. Fol. obl.-lanceol. acuta submembra-
nac. 12-14 cm lga, circ. 1,5 cm lta. Flor. fasciculati v. brevissime
racemosi, numerosi parvi, bract. obl.-lanceol. acuminat. 5-8
m̄ lgae, pedicelli graciles circ. 1 cm lgi. Sep. et pet. subconniventia,
obl. acuta 7-8 m̄ lga. Lab. ellipt.-obl. apiculatū concav. c. 1 cm lgū.
mentū obl. obt. 5 m̄ lg. Col. lata 2 m̄ lga. – Fl. of a delicate pinky white.
Ridge of Matani Siga, 3200 m in forest. Fl. Sept. 610.

An ally of D. viridi-roseum Rf. The habit of the plant is very similar to D. calcaratū A. Rich. but the flowers are borne in fascicles or short arrested racemes on the old pseudobulbs & individually ~~are~~ much like those of D. secundum Ldl. The old pseudobulbs are wreathed in flowers, in allusion to which the specific name is given.

Chrysoglossum Gibbsiae Rolfe – Rhizoma validū. 175.
Pseudobulbi ovoidei, 2-3 cm lgi, monophylli. Fol. lge petiol. elliptic-obl. acumin. plicata, membranac. 5-nerv. c. 20 cm lg. 6 cm lta. petioli c. 8 cm lgi. Scapi erecti c. 60 cm alti, vagin. pauc. vestiti, racemi laxiflori, bract. lin.-lanceol. acumin. c. 1 cm lgae, pedicelli 1.5-2 cm lgi, flores lutei. Sep. post. lanceol. acut. 1,3-1,7 cm lgū, later. falcato-lanc. acuta 1-1,3 cm lga. Pet. lanceol.-obl. falc. acuta 1-1.3 cm lga, sepalis paulo latiora. Lab. 3-lob. c. 1 cm lgū, basi utrinq. auriculat. lobi later. late obl. obt. 4-5 m̄ lgi, lobus interm. obovato-orbicularis, obtus. concav. 5 m̄ lg. Discus 3-carinat. carin. lateral. undulat. & longe extens. carina intermedia parva. Col. arcuata 4-5 m̄ (cm?) lga, alis triangularib. subacut. infra mediū instructa.

About twice as tall as C. vesicatum Rf. the other Philippine species of the genus & more like the Indian C. erraticum Hook. f. in hab.

Thrixspermum vitiensis Rolfe. – Herba epiphytica, caespitosa nana, circ. 5-6 cm alta. Fol. lin. subobt. subcoriac. 4-6 cm lga. c. 2 cm lt. basi vaginata, latiora & imbricata. Scapi gracil. c. 2 cm lgi. puberuli, spicae multiflorae, bract. ovat. acumin. 0.75 m lga pedicelli 1 m lgi, flores viridi-albi. Sep. ovata, apical. 1 m lga. Pet. obl-lanceol. subacuta 1 m lga. Lab. obovato-obl. truncat. v. subbilobum 1 m lgu. Col. brevissima.

Nadarivatu, 2700 m, on trees in forest. 619.

A very small spec. not unlike P. pachyphyta Schlechter in stature, but having much narrower leaves.

176. Glomera Gibbsiae Rolfe – Caules elongati, cylindrici. subgraciles. foliosi 30-45 cm lgi. Fol. obl.-lanceol. acuta, subsessilia subcoriacea. 7-10 cm lga. Capituli terminal. congesti, c. 1.5 cm lgi, basi vagin. ovato-lanceol. tecti; bract. obl. obt. membranac. c. 8 m lgae, pedicelli c. 7 m lgi. Sep. et pet. obl. subobt. 5-nervia, 1 cm lga Lab. columnae adnatum basi saccatum. limbus obl. truncatus leviter recurvus, 3 m lgus, saccus 3 m lgus. Col. brevis lata.

Near summit Mt. Victoria 3800 f. or m.? in Rain Forest. Fl. Sept. 807.

Readily distinguished from G. ramosensis Rolfe by its much broader leaves. The flowers are white.

Sarcochilus gracilis Rolfe – Epiphytica pusilla caespitosa 8 cm alta. Fol. lin. obt. subcoriac. 6-8 cm lg. 2-3 m lt. 1-nervia. Scapi graciles flexuosi, asperuli c. 5 cm lgi pauciflori, bract. ochreat. ltae.

c. 0.5 cm lgae, pedicelli breves. Sep. et pet. ovato-obl. subobtusa, 1.5 cm lga. Lab. subsessile, 1.5 cm lg. 3lob. lobi later. brevissimi, lati obt. lob. interm. triangularis, subacutus, calcar obl. 1 mm lgū. Col. lata 0.75 mm lga. Caps. elliptico-obl. rugulosa 8 mm lga.

Nadarivatu. 3500 m. on ridge in forest. Fl. & Fr. Sept. 727. H. Green.

Anoectochilus vitiensis Rolfe — Rhizoma repens subgracile. Fol. petiolata late ovata, subacuta, membranac. olivac.-brunea, aureo-macul. 3-4 cm lga c. 2.5 cm lt. petioli c. 1.5 cm lgi. Scapi erecti, circ. 15 cm alti, pubescent. vagin. spathac. pauc. instructi, pauciflori. bract. lanceol. acumin. pubescent. c. 1.5 cm lgae, pedicelli c. 1 cm lgi. Sep. ellipt.-lanceol. acumin. concava, pilosa 1-1.2 cm lga. lateralia patentia. Pet. lin.-lanceol. acuta 1-nerv. cum sepalo postico in galeā conniventia. Lab. 3lob. c. 1.5 cm lg. lobi lateral. anguste obl. truncati 8 mm lgi, lobus interm. oblanceol. acuminato-apiculat. 5 mm lgus unguis margine crenulato, calcar obl. 2 mm lgū. Col. 7 mm lga. Caps. ellipt.-obl. 2 cm lga.

Nadarivatu. 2700-3300 (m?) in forest. 635.

Markedly different from its allies in the shape of the lip & in having the usual teeth on the unguis to mere crenulations. This spec. is conspicuous amidst the forest under~~ground~~growth from its exquisit iridescent velvety brown-green leaves rather fleshy in consistence.

Adenostylis vitiensis Rolfe — Rhizoma repens gracile 177.
Caules subgraciles parce pubescentes, breves. Fol. breviter petiolata obl.-lanceol. acuta membranac. 4-7 cm lga. 8-12 mm lt. petioli 1-1.5 cm lgi basi vaginati. Scapi c. 30 cm lgi, gracil. pubescent. pauciflori, vagin. spathac. pauc. vestiti, bract. ovato-lanceol. acuminatae, pubesc. 6-8 mm lgae, pedicelli 5-6 mm lgi. Flor. albi. Sep. ovato-obl.

apical. 1-nervia, 4 m̄ lga, portion̄ cū pet. in galeā connata. Pet. lanceol.-obl. acuta 4 m̄ lga. Lab. 3,5 m̄ lgū, basi concavū apice dilatato-2lobū, lobi divergentes obovato-obl. obt. 3 m̄ lgi. Col. brevis. — Nadarivatu. 2700 m: undergrowth in forest. – 618.

Adenostylis stricta Rolfe — Rhizoma repens, crassiusculū submoniliforme, internodia 7 m̄ lga. Caules brev. foliacei. Fol. numerosa, subsessilia, lanceol. acuminatissima, membran. 12–15 cm lga 1–1,5 cm lt. basi attenuata vaginata. Scapi 35–40 cm lgi erecti, pubesc. vagin. lanceol. acumin. vestiti; bract. lanceol. acuminatiss. 3-nerv. 8–10 m̄ lgae. pedicelli 5 m̄ lgi. Sep. patentia ovato-obl. subacuta, 1-nerv. 4 m̄ lga. Pet. lin.-obl. obt. 1-nerv. 4 m̄ lg. Lab. 3–4 m̄ lg. basi ample ventricos. crassiuscul. margine involut. apice dilatat. 2lob. intus 2callos: lobi sessiles divergent. obl. membranac. c. 1 m̄ lgi. Col. 2 m̄ lga lata.
Vatavula. Nabacara hill, 1000 m: amongst undergrowth in forest. – Fl. Aug. – 667.
Characterized by the strict habit very fleshy ventricose base of the lips & sessile diverging side-lobes.

Cypripedilū Bardolphianū W. W. Sm. & Farrer in Not. Roy. Bot. Gard. Edinb. Febr (1916) 101. – Spec. aff. C. micrantho Franch. & C. ebracteato Rolfe ab hoc floribus multo minoribus, ab illo fol. haud acuminat. scapo haud villoso differt, ab ambobus labello mire verrucoso distinguitur.

Planta 7-8 cm alta. Fol. 2 oppos. c. 6 cm lga c. 3 cm lta, late oblanceol. apice subrotundata glabra. Scap. folia vix superans gracilis 1-florus pil. confervoideis sparse praeditus. Sep. elliptico-ovat. obtusiuscul. c. 1.5 cm lgū. viride, synsepalū aequilongū ellipt.-ovatū apice breviter apiculat. haud bidentat. Pet. sepalo aequilonga, late lanc. ± acuta viridia. Lab. aureū petalis paulo brevius mire verrucosū. Ovar. sparse albido-furfuraceū. [Abb. in Gard. Chron. (1915) May p. 258]

Der Name ist hergenommen von den knobs and whelks mit denen das Labell. besetzt ist, wie Bardolphs Nase. — Verbreitet sich durch Stolonen & verzweigte Rhizome (Farrer & Purdom 139) Kansu. Western China in 8000'. Da sie mit C. luteum vorkommt, so könnte es eine verarmte Form dieser Art sein.

Cypripedium Farreri W. W. Sm. in Not. Roy. Bot. Gard. Edinb. (Febr. 1916) 182. — Sp. aff. C. fasciolato Franch. & C. yunnanensi Franch. priore multo minor ab altero sep. pet.q. viridi-luteis, ovario furfuraceo-puberulo inter alia ex descriptione differt.

Planta c. 20 cm alta. Fol. plerumq. 2, medio v. infra mediū inserta, 5-7 cm lga, 2.5-3 cm lt. ovato-lanc. acuta vix acuminata, sicca tenuiter membranac. utrinq. glabra, margine minute ciliolata, bract. 3-4 cm lga, lanceol. v. ovato-lanceol. Sep. et pet. viridi-lutea purp. striata et macul. sep. superius c. 3 cm lgū c. 1.2 cm lt. ovat. sensī acuminatū synsepal. paululo longius ovato-lanceol. apice 2-cuspidat.

Pet. lat. lin-lanceol. c. 4 cm lg. basi c. 6 mm lt. longiusculi acuminata apice versus torta. Lab. petalis brevius in sicco fere globosum, 2,5-3 cm diam. ore parvo praedito. Ovar. c. 1.5 cm lg. dense albido-furfuraceum.

Rare in deep limestone gorges about Siku. June
Pet. etc. greenish-yellow, lined maroon, lip waxy-cream.
Kansu - West-China - Farrer & Purdom n. 155.
[cf. Gard. Chron. Mai 1915 p. 258.]. Die Mündung d. Lab. ist sehr klein & soll der einer (engl.) Soda-bottle ähnlich sehen.

Microstylis orbicularis W.W. Sm et A.Y. F. Jeff. in Not. Roy. Bot. Gard. Edinburgh. IX (1916) N. 42, 111. — Aff. M. acutangulae Hook. f. habitu florib. q. valde similis, florib. purp. minorib. labelli auriculis divers. divergit, ab omnib. specieb. chinensib. adhuc descript. remota.

Pl. terrestr. erecta 30-50 cm alta, rhizomate brevi, bulbo subterraneo ovoideo vagin. membranac. circumdato. Fol. 2-3 erecto-patent. petiolo scapum basi alte vaginante, ad 15 cm lg. ad 4 cm lt. late lanceol. acuta sicca tenuiter membran. utrinq glabra. Scapus erect. strict. fol. multo superans glaber, basi longe nudus. medio & superne bract. lin-lanc. 6-8 mm lgis deflex. ornatus, racem. sublaxe multiflor. pedicell. c. ovariis gracilib. ± 5 mm lgis. Flor. sicci atro-purp. illis M. acutangulae forma subsimiles, sep. libera patentia later. ± 5 mm elliptica obt. posticum angustius ± 6 mm lg. 3-nervium. Pet. sep. post. vix aequantia lin. Lab. sessile

latissim. ambitu fere orbiculare ± 8 mm diam. lamina denticul. ± 20 alte pectinata, auricul. laminā ± aequantib. columnā amplectentib. apice sub rotundat. basi lamina haud discretis. Col. brevis. ovar. anguste clavat. glabrum.
Yunnan. In the neighbourhood of Tengyueh (Howell 334)
M. acutangula Hook. f. (Ic. Plant. t. 1835) seems to be the nearest. the structure of the flower is very similar, though there are differences in the colour & in the labellum.

Giulianettia Rolfe genus nov. Icon. Pl. XXVII (1899) t. 2616.
Sep. patentia subaequalia, lateralia basi supra insertionē oblique extensa, post labelli calcar in laminā breviter bilobā connata. Pet. sepalis angustiora. Lab. basi columnae affixū et cū ea in tubū brevē cōnatū, lamina erecta, integra, late cordato-ovata, concavā brevissima, medio crassiuscula, basi longe calcarata. Col. brevissima crassa, clinandriū cavū, ampliū, crenulatū. Anthera terminalis, opercularis incūmbens, convexa, 2-locularis, pollinia? — Herba epiphytica humilis. Caules graciles, ramosi, vaginis scarios. striat. verrucos. obtecti paucifoliati. Fol. subteretia. Flor. terminal. solitarii, e medio bractearū imbricatarū paleaceo-scariosarū horizontale ad apices ramorū enascentes.

124.

G. tenuis Rolfe (Gymnura?). Caules breves, parce ramosi; foliorum vaginis [illegible] 3-4 poll. lgi. Fol. linearia subobtusa, subteretia 6-10 lin. lga, vaginis striat.-venosis. Flores solitarii, terminales; bract. spathaceo-oblongae, subacutae, [illegible] striatae 6 lin. lgae. Pedicelli 5 lin. lgi. Sep. lin.-lanceolata, acuta, 6 lin. lga; lamina 1½ lga & lta. Pet. linear. acuta 5 lin. lga. Label. [illegible]-ovatum, subobtusum, 1½ lin. lgum, concavum, calcar cylindricum, obtus. 4½-5 lin. lgum. Col. crassa, 1 lin. longa. — New Guinea. Mt. Scratchley 12000' (Giulianetti)

A very interesting monotype, clearly allied to Ceratostylis but differing in the large solitary flowers, in the auriculate bases of the lateral sepals [illegible] with a limb behind the spur of the lip & in the long spur, which is about 3 times as long as the lateral sepals. The pollinia were missing from the flow. examined.



Giulianettia tenuis Rolfe

G. tenuis Rolfe (sp. unica) — Caules breves, parce ramosi, foliorū vaginis striat. verrucos. obtecti 3-4 poll. lgi. Fol. linearia subobtusa, subteretia 6-10 lin lga, vaginis striat. verrucos. Flores solitarii, horizontales, bract. spathaceo-oblonga, subacutae, involutae striatae 6 lin. lgae. Pedicelli 5 lin. lgi. Sep. lin.-lanceolata, acuta 6 lin. lga, lamina 1½ lga & lta. Pet. linear. acuta 5 lin. lga. Lab. late cordato-ovatū, subobtusū, 1½ lin lgū, concavū, calcar cylindricū, obtus. 4½-5 lin. lgū. Col. crassa, 1 lin longa. — New Guinea: Mt. Scratchley 12000' (Giulianetti)

A very interesting monotype, clearly allied to Ceratostylis but differing in its large solitary flowers, in the auriculate bases of the lateral sepals united into a limb behind the spur of the lip & in the long spur, which is about 3 times as long as the ~~sepals~~ limb. The pollinia were missing from the flow. exami ned.

<u>Diplocentrum congestum</u> Wight Icon t. 1682. Hook. Fl. Brit VI, 78. et Icon. Pl. t. 2687 (1901) a <u>D. recurvo</u> Lindl. fol. latioribus & racem. non v. parum ramos. et <u>pendulis</u> differt.

Caulis brevis. Fol. recurva, lin.-obl. apice inaequaliter biloba, lob. obtus. 3–3½ poll. lga. 4–6 lin lt. Racemi penduli interdum parce ramosi, 3–6 poll. lgi, florib. numeros. Bract. patentes triangulari-ovatae acutae ½–1½ lin. lgae. Pedicelli 1½ lin lgi. Sep. elliptico-obl. obt. 1¼–2 lin. lga, lateral. reflexa. Pet. elliptico-obl. obt. 1¼–1½ lin lga. Lab. obl. apice reflex. & truncatum, basi paulo latius, & obtuse carinatum c. 2 lin lgum, calcaria saccato-oblonga, 3/4 lin lga, paulo divergentia. Caps. obl. brevit. pedicell. 5 lin. lg.

India. Travancore. Syamally Hills (Wight.) without loc. (Wodrow)

"A character in the structure of the genus which appears to have been previously overlooked is the curious flap-like appendage at the base of the column which closes the mouth of the spur."

Dieser "flap-like appendage" ist leider auf der Taf. 1682 so unklar gezeichnet, dass es unmöglich ist, die Struktur zu verstehen. Im übrigen unterscheidet sich die Abbildung in den Ic. Pl. von der älteren Wightschen hauptsächlich durch die hängenden Blt. stände.

Journ. Linn. Soc. XLV (1921) 246-55 by B. A. Rendle - Compton auszugsweise; die schon von Schlechter erwähnten Arten sind hier weggelassen, Notizen, neue Standorte, Nummern u. s. w. siehe in Schl.'s Arbeit VII. 19.

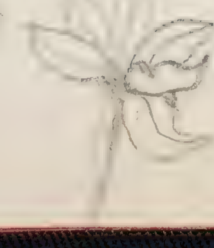
Microstylis polyphylla Rdl. Comboui Mts. 3000' (2815) Fl. dull red & yellowish, lip with deep crimson blotch.

Dendrobium verruciferum Rchbf. Presqu'île Bogota Terrestr. 1500' (1321) Lip green, perianth segments brownish.

Dendr. austro-caledonicum Schlechter. (Compton 2050) Riv. Ngoyé. Apricot-coloured

247. Dendrob. Comptonii Rendle l.c. 247. Pl. XIII fig. 13. — Epiphyticum. Caulib. cylindr. c. 1 cm crass. sicc. valde sulcat. Fol. 4-5 apice versus congest. late lanceolat. apice bilobulat. coriace. 12-13 cm lg. 2,8-3,8 cm lt. Racem. folia paulo excedentib. multiflor. 12-14 cm lg. Florib. carnosul. luteis extus sanguineo-punctatis pedicell. tenuib. 1-1,5 cm lg., bract. minut. linear. angustat. sep. et pet. 8-9 mm lg. sepal. dors. obl.-obtuso, sep. later. e basi latiore late oblong.-falcata paulo excedente. Pet. subfalcato-obl. obtus. et sepalorum margines adhaerentib. Lab. 5 mm lg. 3lobo, lobo med. oblato 3,5 mm lgo 3 mm lto, supra breviter acuminato, disco lineis 2 elevat. instructo, lob. lateral. vix 1 mm longitudinis excedentib. suberect. obtus. Col. brevis lata 2 mm long.

Mt. Canala. Forest 1000' (1151) June. „Speciosa" group, recalling D. gracilicaule F. v. Muell but a much larger plant. Stem yellow, covered with whitish thin membranous remains of the leafsheats. Fig. 13



Bulbophyllum lingulatum Rendle – Pl. parva, epiphyt. 247
repens, rhizom. elongat. ramosū. teres. vaginat. laxe pseudobulb. obsessū. polyrhiz. Radicib. filiform. Pseudobulb. ovoid. 4-7 m̄ lg. 3,5-4 m̄ crass. glabr. 1-foliat. Folio patente obl.-elliptico, obt. glabro, coriac. 12-15 cm lg. 3,5-5 cm lt. Scap. filiform. glabr. interdū fol. excedentib. interdū brevioribus basi & sub medio vaginul. obsessis 1-floris. bract. ovata acuminata c. 1 m̄ lg. Sep. subaequilong. 6 m̄, 3-nervat. sep. dors. ovat. subacuto, sep. lateralib. late ovat. breviter acut. ad columnae pede cohaerentib. et mentū formantib. Pet. lanc. subacut. 4 m̄ lg. Lab. crasso apice columnae pedis ~~[illegible]~~ curvato oscillante, sub medio valde reflexo parte inferiore 3/4 m̄ lg. trapezoideo, laterib. supra incurvat., parte superiore linguiformi sub medio sulcat. 1,2 m̄ lg. Columna breve vix 3/4 m̄ lg. pede producto demū sursū curvato, ovario graciliter pedicellato clavato anguste alato. No note of locality (Compton 1818)
Resembles in size & habit the endemic B. ngoyense Schl. but differs in floral details

Bulbophyllum Comptonii Rendle sp. n. Pl. epiphyt. Pseudobulbo oblique ovoid. 1.4 cm lg. 1.1 cm crasso e rhizom. repente oriund. 1-foliat. Fol. petiol. obl.-elliptico, glabro. coriac. 9 cm lg. (incl. petiol. 1.9 cm) 2.4 cm lt. Scap. erect. foliū exced. tenui torte glabr. vagin. pauc. superne acuminat. distit. obsesso, paucifloro 13 cm lg. 1 m̄ crass., bract. distich. arcte compress. late ovat. acuminat. glabr. ovario breviter pedicellat. paulo breviorib 5 m̄ lg. Flore inter mediocres erecto. Sep. dorsale lanceol. acumin. apice carinato incrassato 1,2 cm lg., sep. later. e basi latiore 5,5 m̄ obliq. ovatis apice falcato-acuminat. carinulat. 1,2 m̄ lg. Pet. columnae subaequilong. ligulato-obl. apice tridenticulat. carinulat. 5 m̄ lg. 248.

Lab. obovato, basi concavo, call. 2 instruct. & laterib. elevat. tū ovato acuminato & margine crenulato in facie superiore ~~sulcat~~ sulcato 11 m̄ lg. Col. erecta in pede subaequi lg. transeunte, ovario clavat. sulcato.

No note of locality. (Compton 1790)

Recalls B. pachyanthū Schl. in habit & general structure, but is a smaller plant with flowers about half the size.

Cirrhopet. Thouarsii Lindl. — Mt. Mou, on vertical trunk damp gully, cretaceous forest (Compton 529) Lip flexible spotted with ~~deep~~ dull dark red, petals pale.

249 — Phreatia Comptonii Rendle n. sp. — Pl. epiphyt. parva 6 cm alt. rhizoma abbreviat. pseudobulb. dense obsessū. pseudob. 5 m̄ lg. ut apparet 2-foliat. Fol. erecta ligulata obt. apice inaequaliter bilobulata basin versus paulo angustata utrinq. glabra 5.5 cm lg. c. 5 m̄ lt. scap. radical. erect. tenuis glaber, ~~[illegible]~~ supra basin vaginula tū bract. lineari-acuminat. membranat. (7–4.5 m̄ lg.) instructo, racemus c. 20-floro, 3 cm lg. Florib. minut. pedicellat. bracteas ovato-acuminatas excedentib. sep. dorsale concav. late ovatū subacut. 1 m̄ lg., sep. later. obliq. late ovat. subacut, 1.5 m̄ lg. Lab. sub medio late obl. supra mediū dilatato, apice late rotundato 1 m̄ lg. Col. brev. 1/2 m̄ lg. — Flow. white. Fl. March

Pl. 13 fig 10–12.




Mt. Mou. 3000' (Compton 580). — Apparently near the endemic spec. P. pachyphylla Schl. but differs in floral details.

Spathoglottis Vieillardi Rchbf. - R. S. 249 - ~~Lep.~~ Bocage, creekside scrub area, serpentine 900'. Sep. & pet. pink, lip purple & yellow. (Compton 1395) - Dutch New Guinea.

Spathoglottis unguiculata Benth. & Hook. f. (Limodorum unguicul. La Billard. = Sp. breviscapa Schl. - Ignambi. Gneiss 1000' (Compton 1663) - Isle of Pines. Pteridium association, serpentine plateau. (Compton 2278). Flow. rosy purple, middle of lip yellow.

Spathogl. Deplanchei Rchb. f. is judging from the description also conspecific.

Phajus grandifolius Lour. Mt. Panié; Ignambi, moist spots in Niaouli region, Gneiss. (Compton 1800, 1800 bis)

Phajus neocaledonicus Rendle sp. nov. Pl. 13 fig. 5-7.

Pl. terrestris. Caul. erect. 2pedalis Fol. vaginantib., nerv. valde prominentib. singulis anguste lanceol. plurinervis, basi in parte petiolarē elongatā angustata, superne quoque angustato acuminato, lamina 17 cm lg. 6 cm lt. Scapo brect. vaginantib. subaloss. divisis 4 cm lg. instructo superne florifero, bract. florū caducis florib. pedicellat. subpatentib. alb. Lab. flavo, apice roseo. Sep. obtus. 7-nervis aequilong. 2,8-3,3 cm lg. 1,1-1,2 cm lt. sep. dorsale late oblanceol., sep. lateral. suboblique elliptico-obl. Pet. oblanceol.



ligulat. apice paene truncat. 5-nerviis, 2,6–2,8 cm lg. 7 mm lt. Lab. convoluto, antice 3-lobo., lob. lateral. obtuse triangularib. intermedio breviter orbiculare-retuso, carin. 2 parallel. median. e basi in apice vix apiculata decurrentib. 2,6–2,8 cm lgo, calcari nullo. Col. 2 cm lga facie concava superne ampliata & alata.

Mt. Arago, frequent in some parts of moist forest (Compton 1408). – Leav. dark green, nerves prominent making sheaths & stem ridged. Flow. ovary & pedicel white, lip creamy yellow with faint rose patches outside mouth. Apparently allied to the endemic Ph. Robertsii F.v.M. but differing in colour, details of size & shape of floral leaves. It is also near the malayan Ph. amboinensis Bl. collect. by Banks & Solander in Otaheite but has larger flowers.

250. Phajus flavus Lindl. – Mt. Mou. Conifer forest. 3500' (Compton 498). Flow. yellow, lip with brown folded edges. A small form of this malayan species.

Calanthe angraeciflora Rchb. f. – Ermitage stream 300' serpentine. (Compton 205), Mt. Canala. schists. forest. (Compton 1152)

Calanthe Langei F. v. M. – Mt. Arago 1500' (Compton 1435) Ignambi, gneiss, 1000–2500' (Id. 1682) – Fl. orange yellow with pale transparent spurs.

Calanthe oreadum Rendle n. sp. Pl. XIII fig. 9.[1] Pl. terrestr. glabra, fol. magn. lanceol. basi in vagina angustat. superne acuminat. plicato-venos., ven. primariis prominentib. 5, lamina 60 cm lg. 7.5 cm lt. Scapo erecto terete valido, folio breviore 1½–2-pedalis, bract. vaginantib. tubulos. dissit. 3.5–3 cm lg. praedito,

[1] Name on fig. [illegible] [illegible] [illegible]

superne sublaxe florifero, bract. florū obsolet. Florib. sine aroma erecto-patentib. semiapert. pedicell. gracilib. c. 1 cm lg. Perianthii segment. albid. apice viridescentib. Sep. dors. concav. obovato, apice subacuto 3-nerv. 9 mm lg. c. 5 mm lt. sep. lateral. oblique elliptico-obovat. apice subacut. 3-nerv. 1 cm lg. 5 mm lt. Pet. obovat. obt. obsolete apiculat. 5-nerv. vix 1 cm lg. 6 mm lt. Labelli parte inferiore columnae adnato, parte superiore libero vix 5 mm lgo, 3lobo, lob. lateral. parv. suberect. breviter ovat. 2-2.5 mm lg. lobo intermedio subquadrato 3,5 mm lt, apice 2lobulato, lobul. rotundat, medio apiculato, calcari pro flore magno sacciformi compresso obt. 8 mm lg. paene 5 mm lt. ore callo sub labelli basi ornato, col. 5.5 mm lga.

Mt. Canala. Moist forests, 2000' (Compton 1239), Mt. Arago logs in damp forests, 1500' (Id. 1436), Mt. Panié 1500' (Id. 1761)
Near the endemic species C. Balansae Finet, but differs in floral details, especially in the form of the lip.

251.

Calanthe neocaledonica Rendle sp. nov. Pl. XIII fig. 8. — Pl. terrestr. caule tumido, radicib. plurib. velutino-pilos. instructo. Fol. glabr. plurib. radicalib. magn. anguste lanceol. basi in vaginā angustat. apice acut. plicato-venos. ven. primariis conspicuis 5, lamina 5,5 dcm lg. 7 cm lt. Scap. 3-pedal. laterali subvalido terete glabro, bract. 3-4 vaginantib. nigrescentib. aequaliter divisis 3-4.5 cm lg. praedito. Racemo multifl. 25 cm lg. bract. florū obsolet. Florib. alb. patentib. inter mediocres graciliter pedicellat. Sep. dors. obovato-ellipt. ~~apic~~ brevit. acuminato 5-nervio 12 mm lg. 8 mm lt., sep. later. ellipt.-obl. apice breviter falcato acuminat. 5-nerv. 12.5 mm lg. 6.5 mm lt. Pet. concav. late ellipt.-obovat. apice vix v. breviter acut. 7-nerviis 12 mm lg. 8 mm lt. Labelli parte inferiore columnae adnato, parte super. libero 7.5 mm lg. 3-lobo,

132. 


lob. lateral. brevib. suborbiculari-ovat. obt. 2.5 m lgis, lobo intermedio lato, margine crispulo apice retuso 5 m lg. 5.5 m lt. calcari pro flore magno crasso curvato 7 m lg obtuso. Col. brev. 6.5 m lg. crassa, margine superiore denticulata, ovario cū pedicello 2 cm lgo.

Mt. Arago, moist forests. 1000' (Compton 1409). Ignambi. 1000-3000' (Id. 1609). Flow. white tinged with yellow when old with a waxy appearance. – Near the last spec. but differs in floral details & especially in the longer curving lip.

Geodorum pictum Lindl. Mt. Mou, lowland forest 700' (Compton 439) Flow. dingy pink.

252. Luisia teretifolia Gaud. Anse de la Mission, Nouméa near sea & in mangrove swamps. (Compton 420) – Lip deep purple brown velvety, other perianth segments greenish tinged with brown.

Sarcochilus neocaledonicus Rendle sp. nov. Pl. epiphytica. Caule repente 2 m crasso, radicib. elongat. & vagin foliorū per sistentib. obtecto. Fol. ligulat. obtus. oblig. emarginat. crass. sinuosul. 4–5 cm lg. 7–8 m lt. Racem. pendentib. fol. subaequa long. ut apparet 15-flor., bract. parvul. ovato-deltoideis 1 m lg. Florib. parv. glabr. Sep. later. ligulato-obl. obt. 1-nerv. concav. 5 m lg. sepalo dors. latiore et magis concavo. Pet. line ari-ligulat. superne via latiorib. obtus. 1-nervis sep. vix aequantib. Lab. valde unguiculato, ungue complanato crasso 1.5 m lgo, superne subito reflexo et 3-lobato c. 2 m lgo. lob. lateral. oblig. triangularib. quoque in apice tenue curvat. excurrente, lob. intermedio parvo sacciformi, disco callis 2 parallel. median. instructo. Col. brevis crassa 1 m lg. pes c. 1.5 m lg.

Ignambi. forest 1000' (Compton 1621) Flow. orange-yellow; lips with 2 fine upwardly directed points.

Apparently near the other endemic spec. S. verum Schlechter & S. koghiensis Schl. but distinguished by floral détails especially of the lip.

Spiranthes australis Lindl. - Ignambi; Niaouli-Pteridium-Gleichenia association 1000-2000' (Compton 1493, 1849) — Mt. Panié. forest clearing 1500' (Id. 1830)

Rhamphidia rubicunda Rchb. f. - Isle of Pines. frequent in coralls forest. (Compton 2260). Corolla dull whitish brown spike erect. 253.

Rhamphidia scripta Rchb. f. - Ignambi. humus in forest. (Compton 1675). Mt. Panié 1200' (Id. 1834) Long underground stem with elongated tubers at intervalls. Flow. yellowish brown.

Microtis parviflora R.Br. - Ignambi. occasional in Niaouli-Gleichenia association 2000' (Compton 1492) Australia-China.

Pterostylis acuminata R.Br. - Mt. Canala. Niaouli grass association 1500' (Compton 1275) - N. Sth. Wales.

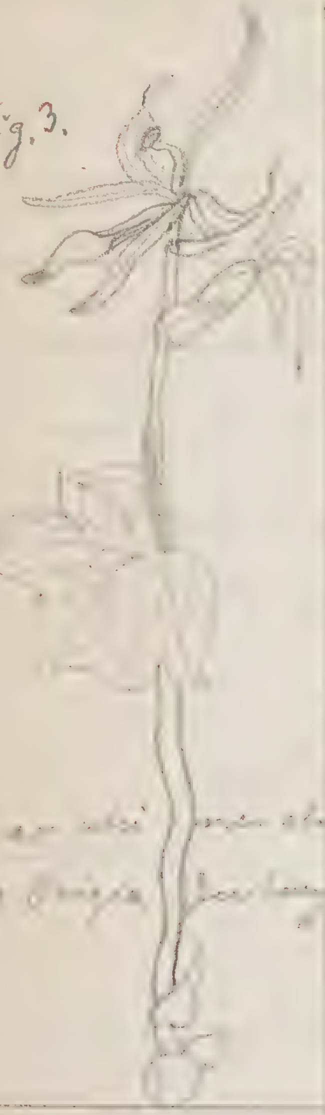
Pterostylis ovata R.Br. - Mt. Panié 4000 (Compton 1817)

Die übrigen auf S. 253 erwähnten Arten finden sich mit ergänzenden, aus dieser Arbeit entnommenen Notizen in d. Schlechterschen Arbeit in Engl. Jahrb. 1906 in Bd. VII der gedruckten Collectaneen

Pterostylis ophioglossa R.Br. - Mt. Canala (Compton 1275 bis) 254.

Acianthus elegans Rchb. f. - Nekando - Spermolepis-forest. Serpentine. 1000' (Compton 980). Stem reddish, single leaf, green above, dark purplish below. Flow. green, column with red tips.

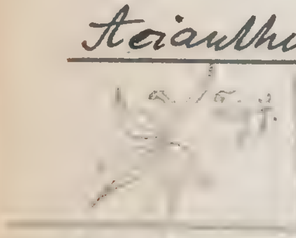
Fig. 3.



<u>Acianthus nanus</u> Rendle n. sp. Pl. XIII fig. 3.

Pl. terrestr. glabra 7 cm alta. Caule e tubere parvo rotundo erecto, medio 1-foliat. 2-flor. Fol. circuit. orbiculare, diam. 2,2 cm, basi cordat. 5-lobo, lob. rotundat. apiculat., bract. ovat. acut. pedicello excedentib. 6-8 m̄ lg. Sep. anguste lineari-acuminat. apice obtusiusc. dorsale 1,7 cm, lateral. 1,4 cm lg. Pet. oblique obl. elliptic. superne falcato-acuminato apice caudat. 3-nervis 1,1 cm lgis. Lab. 1,4 cm lg. parte inferiore ligulata, supra mediū dilatato, apice 3 m̄ lt. 3-lobo, lob. lateral. obscur. rotundatis, lobo medio angusto acuto 3,5 m̄ lgo, basi 2-auriculato Col. supra mediū curvato, in margine anteriore alata, ala apice et medio ampliata. <u>Ignambi</u>. Rather rare in moist forests 2500-3500' (Compton 1700) Flow: greenish white tinged with purple. August. — Near A. cymbalariifolius F. v. M. et Kränzl. but differs in the shape of the lip & other floral details.

<u>Acianthus culiciferus</u> Rendle n. sp. Pl. XIII. fig. 4. — Pl. terrestr.



glabra, c. 2.5 dcm alta, Caul. e tubere ut apparet piriformi erecto pergracili, flexuoso, medio 1-foliato, breviter 4-5-floro. Fol. 5-10 m̄ lg. 4-partit. segment. elliptic. apiculat., bract. ovat. 2,3-3 m̄ lg. pedicellos breves paulo excedentib. Sep. anguste linearib. sub apice angustatis, dorsale 9-11 m̄ lg., lateral. paulo breviorib. Pet. oblique elliptico-obl. subito acuminat. 1-nervis; 4-5 m̄ lg. Labell.

e basi cordata 1.5 m̄ lt. angustat. acuminat. 7 m̄ lg. Col. tenuis sub apice curvata 4 mm lg.

River Ngoyé, among dead leaves & humus in Casuarina forest. near river. serpentine 300' (Compton 1023) May.

Allied to A. tenuilabris Schlechter (not seen) differing in the longer sepals & shape of the lip.

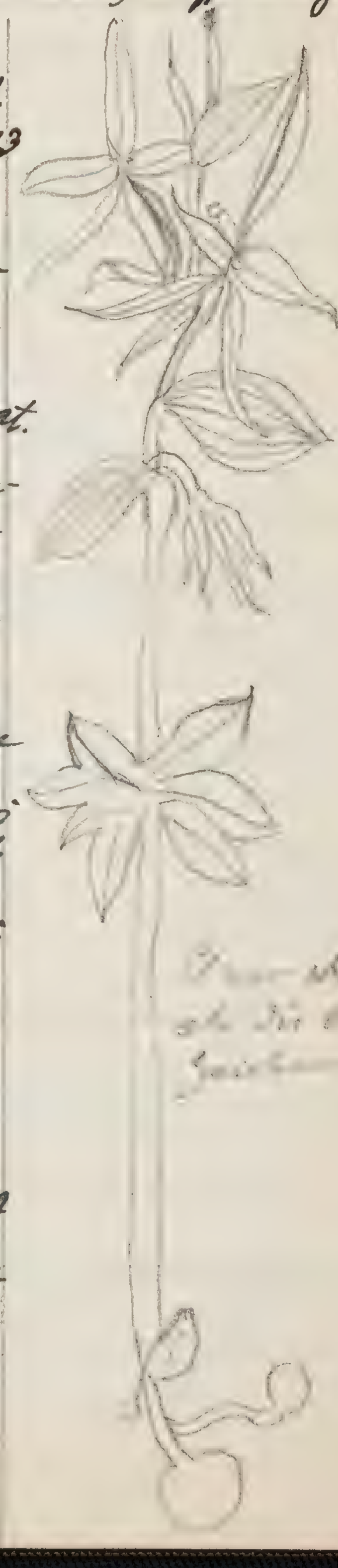


Fig. 1.

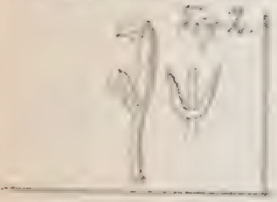
Corianthus bracteatus Rendle n. sp. Tab 13

Pl. terrestris glabra 10-15 cm alta. Caul. e tubere piriformi erect. terete veluti foliis rubro-tincto, supra mediū 1-foliat. 3-4-flor. Fol. 5-partit. segment. obl.-ellipti̇c. v. obovat. apiculat. usq. ad 1.2 cm lg., bract. inter congeneres magn. foliac. elliptico-obovat. apiculat. 1-1.7 cm lg. pedicellū & ovaria superantes. Flor. atrorubri. Sep. anguste lin.-oblanceolat. superne caudat. 1-nerv. 1 cm lg. Lab. glabr. 1.2 cm lg. e basi late lineari 3 m̄ lg. subito extensū superne dilatat. et 4 m̄ lt. demū 3-lobat. lob. triangulari-acuminat. lateral. 2 m̄ lg. lobo medio 4.5 m̄ lg. Col. gracilis 5 m̄ lg. medio geniculata et in facie anteriore appendice cordato-acuminato depresso instructa, supra mediū incurvata, ovariū c. pedicello brevi usq. ad 1 cm lg.

Mt. Mou, cloud forest 3500' (Compton 631)
Flow. dull dark red.

This & the next species are characterized by an appendage about the middle of the anterior face of the column, a character which has not been hitherto recorded in the genus.

**255.** Acianthus corniculatus Rendle sp. nov. Pl. XIII fig. 2.
Pl. terrestris glabra 6-16 cm alta. Caul. erect. teres v. medio supra = 1-foliat. 2-flor. Fol. ut in A. bracteato, bract. parv. late ovato acut. pedicellū vix excedent. 2-2,5 m̄ lg. Sep. linear. sub apice acuto angustat. dorsale 8,5 m̄ lg. lateralia vix 7 m̄ lg. Pet. oblg. elliptica obtus. 4,5 m̄ lg. Lab. glabrū 5,5 m̄ lg., e basi angusta biauriculata dilatat. superne 3 m̄ lt et 3-lobat., lob. lateral. brevib. rotundat. lobo medio ovato-triangulari subacut. Col. gracilis 4 m̄ lg. medio geniculata & in facie anteriore appendice erecto bicorniculato instructa, supra mediū incurvata. ovar. cylindric. 6,5 m̄ lg.




Ignambi. moist forests 3000' (Compton 1712) Plant with much anthocyan throughout. August. Flow. smaller than in the last species & the subtending bract inconspicuous.

Calanthe Fargesii A. Finet in Bull. Soc. Bot. France T. 46 (1899) 434.x) — Herba terrestr. mediocris. Caulis brevissime, fere in pseudobulbū incrassat. 2-vaginatus. vaginae foliis plicato-striatae acūtae. Folia 4, longe lanceolata, acūta basi attenūata. plicato-striata. Scapūs lateralis e basi vaginarū oriundus, 1-vaginatus gracilis, foliis longior ad ⅓ tertiā superiorē partē laxe rareniflorus. Flores

x) Pl. IX A fig. 1-8.

mediocres aperti, gracillime pedicellati; bract. acutissim. lanceolat. vix ovarii pedicellati puberulentis dimidiā parte attingentes glabrae. Sep. glabra ovata acuta, fere acuminata. 5-nervosa, lateral. paulo obliqua aequilonga. Pet. linear. acuta 3-nervosa glabra. Lab. glabr. inappendiculatū, integr. rhombeū, acut. membranaceū, calcaratū. Calc. breve, incurvū, subconicū, obtus. extus puberulus, intus hispidus ovario paulo brevius. Col. brevis crassa apoda, alis c. labelli basi attenuata connatis, clinandriū cavū, marginib. sub 3lobat. rostell. 2lobū, lob. acerosis anticis, pollinarii glandulā amplectentib., stigma integrū transversū. Anthera incumbens 2-locular. antice rostrata, pollin. 8 cerea, caudicul. 2 affixa, glandula unica viscosa. (abbé Farges)

Chine: Su-tchuen oriental, environs de Tchen-keou-tin

Voisine de Cal. alpina à labelle entier, absolument nu, sans lamelles ni callosités d'aucune sorte. La fleur plus grande que celle du C. alpina est remarquable comme d'ailleurs toute la plante par son port grêle qui rappelle ~~celle~~ celui du C. puberula.

<u>Calanthe Delavayi</u> A. Finet in Bull. Soc. Bot. France T. 46 (1899) 434.x) — Herba terrestr. habitu affinis <u>C. alpinae</u> sed scapo longiore & flore distincta. Flores bract. lanceolat. acuminatae ovariū pedicellatū paulo superantes glabrae. Flor. mediocres cū iis C. alpinae aequantes pedicellati. Sep. erecta glabra lanceol. acuta, lateralia paululū obliqua. 7-nervosa. Pet. subconformia, breviora, glabra 5-nervosa. Lab. fere liberū

x) Pl. IX B fig 9-16.

integrū, rhombeū, antice truncatū, marginib. antic. erosis, a basi usque ad tertiā anticā partē venis 3 parallel. paululum prominentib. percursū, calcarat. Calcar rectū ad apicē clavatū, intus & extus pubescens c. ovario subaequans. Col. elongata more generis Phaji, apice clavata alata, antice puberula, ad imā basin c. labello connata, clinand. concavū fere anticū marginib. denticulat., rostell. parū prominens, emarginatū, stigma transversū integrū. Anth. incumbens antice rostrata, 2locular. locul. imperfecte 2locellat. pollin. 8 subaequalia fasciculata, caudicula 1 viscosa orbiculari connexa.

Chine: Yunnan (Delavay 2888, 4067) Bois de Koutoui au dessus de Mo-so-yn à 3000 m. Juin 1887 fleur pourpre-noir.

Cette plante a tout à fait le port du Cal. alpina, la fleur est un peu plus grande, le labelle à peine dentelé sur le bord antérieur et non fimbrié, l'éperon en massue la colonne rapproche cette plante du genre Phajus aussi bien que son labelle presque libre et à peine soudé à l'extreme base de la colonne, cependant le pollen cireux est bien celui du genre Calanthe.

Calanthe Balansae A. Finet in Bull. Soc. Bot. France T. 46 (1899) 435. Pl. X A. fig. 1-15. — Herba terrestr. rhizomate repente, vaginis fibros. tecto. Caulis annotinus basi 2-3-vaginat. non manifeste pseudobulbos. Folia

longe lanceol. manifeste 5-nervosa, basi articulata et attenuata, fere petiolata plicato-venosa. Scap. lateral. e vaginis oriundus elat. 4-vaginat. ochreatis arcte appress. ad tertiā superiorē partē dense racemiflorus cū foliū aequans. Flores parvi semiaperti longe et gracillime pedicellati; bracteae minimae (v. deciduae?) Sep. obovata cuspidata, 3-nervosa, glabra, erecta. Pet. cuneata aequilonga, acut. 3-nerv. glabra. Lab. sepalis brevius, trilob. v. potius hastatū, marginib. crenul. obtuso-acutū, inappendiculat, glabr. calcaratū, calcar c. ovario rectangul. latū, lateraliter compressū, ad apicē breviter reflex. intus & extus glabrū. Col. brevis crassa, ad dimidiā parte c. labello connata, clinandriū concavū, marginib. integr. rostell. integr. deflexū, stigma integrū transversū anthera obovata, antice emarginata, 2locular. poll. 8 cerea ovata fasciculata, caudicula 1 orbiculari convexa.

Nouv. Calédonie. Balansa 3067. Forêts au nord de la Conception, 500 m d'altitude 21 VI 70. Fleurs blanches (Deplanche) Mt. Mu, 1200 m d'altitude.

Cette plante est alliée aux Cal. clavata de l'Inde et C. lyroglossa de Nouv. Caléd. ~~D'port~~ beaucoup plus robuste elle s'en distingue à première vue par son large éperon aplati. La hampe très large à la base va en s'amincissant rapidement vers le sommet où elle se termine en une pointe très fine.

Calanthe pusilla A. Finet in Bull. Soc. Bot. France T. 46 (1899) 436. Pl. X B fig. 16-28. — Herba terrestr. nana, rhizomate repente vagin. fibros. tecta. Caulis obsolet. ad pseudobulbū minimū reductus; basi vaginat. Fol. 3-4 plicato-venosa, sessilia, lanceol. acūta. Scap. terminal. e foliis oriundus, duplo longior; ad tertiā superiorē partē dense racemiflorus, bract. minimae acutae. Flores parvi gracile pedicellati semiaperti. Sep. ovata, obtuse acuta extus puberula, posticū 5-nervosū, lateralia 3-nervosa. lanceol. basi attenuata glabra. Lab. 3lobū, calcaratū, glabr. lobi lateral. magni rotundati, lob. medius cordat., discus lamell. 3 parallel. auctus., ad lobi medii isthmū dentes 3 membranaceas fingentibus, calcar rectū e. ovario pubescente et columna parallelū, conico-obtusū, intus densius puberulū. Col. crassa nana, cū labelli ungue usque ad apicē connata, clinandriū concavū, marginib. integris, rostell. parū prominens emarginatū, stigma integrū, transversū, anthera obovata, incumbens 2locular. pollin. 8 cerea ovata caudicula elongata unico ad apicē dilatato et viscoso affixa.

Chine: Su-tchuen oriental, environs de Tchen-Kéou-tin (Farges).

La plus petite espèce de Calanthe; de la racine au sommet de la hampe, les plus grands échantillons ne dépassent pas 25 cm. Le port général est celui du C. striata, l'affinité des fleurs la place à côté du C. Mannii, dont elle se distingue par sa taille, ses fleurs en grappe serrée et son labelle à lobe médian cordiforme et non échancré.

Bulletin du Jardin Botanique de l'Etat Bruxelles V, 2 (1916) 174.

Bulbophyllum[x)]. Megaclinium bambiliense De Wildem. Radicib. flexuos. filiformib. laevib. c. 1 mm lt. rhizomate elongato squamato. Pseudobulb. 5,5-6,5 cm lg., 12-16 mm lt. 4-6-angularib. bifoliat. 7-9 cm distantib. Fol. erect. basi ± contract. 9-15 cm lg. 10-17 mm lt. ± coriaceis, apice rotundat. breviter inaequilateralib. scap. erect. ad 30-40 cm lg. basi circ. 8-squamat., squam. arcte amplectentib. ± acut. 1,2-2,5 cm distantib. et ad 10 mm lg. rhachi valde compressa, alato-dilatata, c. 16-20 cm lg. 9-10 mm lt. bract. triangularib. post anthesin reflex. florib. 3,5-7 mm distantib. excentric. fructib. matur. 13 mm lg. et 6 mm lt.

Environs de Bambili, rive droite de l'Uele (1905) F. Seret N. 208.
Voisine du Megacl. ealaense

Megaclin. Brieyi De Wildem — Radicib. flexuos. 6,5 mm diam.?? rhizomate elongato squamoso, pseudobulb. 18-25 mm lg. 7-8 mm lat. 3-4 angular. 10-15 mm distantib. 2foliat., fol. erect. basi ± contract. apice rotundat. 3,2-5,2 cm lg. a. 6-8 mm lt., ± coriac., scap. erect. 3-4 cm lg. basi squam. 3-7 mm distantib. 5 mm circ. lg. ± acut. arcte amplectentib. ornat., rhachi compressa v. alato-dilatata, c. 2-2,5 cm lg. usq. ad 2,5 mm lt. breviter brunneo-velutino-squamata, bract. triangularib. post anthesin refract. paulo ultra 1 mm lg. pedicello circ. 1 mm lgo, sep. intermedio elliptico, apice rotundato, margine inerrato, circ. 6 mm lgo, 0,7 mm lto, lateralib. extus squamos. triangularib. acut. c. 1,5 mm lg., pet. elliptico-lanceol. subacut. c. 4 mm lgis, labell. ??

Eala. Juin 1905 leg. Brieye, coll. L. Pynaert n. 1456.
Espèce voisine des Bolb. minutum (Rolfe) Engler = B. kewense Schlechter et B. luteoscens Rolfe. — !

x) Alle Megaclin.- Arten dieser Arbeit haben von Herrn E. De Wildeman bekommen: Bulbophyllum bambiliense De Wildm. Megaclin. bambil. De Wildem u. s. w. zur Auswahl je nach Geschmack u. Neigung.

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Megaclinium ealaense De Wild. — Radicib. flex... etc.
(145) c. 1 mm lt. rhizomate elongato squamato, pseudobulb. 2,5-3,5 cm lg., 8-12 mm lt. 3-5-angulat. angul. acut., 3,5 cm distantib. basi bracteat. bract. papyrac. caduc. ad 3,5 cm lg. 2foliat., fol. erect. basi ± contract. 10-13 cm lg. 10-17 mm lt. ± coriac. apice rotundat. et leviter inaequilateralib., scap. erect. 17-22 cm lg. basi 4-5-squamulos. squam. 10 mm circ. distantib. amplectentib. ± acut. circ. 5-6 mm lg., rhachi compressa alato-dilatata, 12-17 cm lga, 9-12 mm lt., bract. triangularib. post anthesin reflex. 3-4 mm lg., florib. brunneolis, excentric. c. 2-6 mm distantib., pedicello 1,5 mm lgo, Sep. glabr. intermedio elliptico subacuto, apice leviter incrassato, lateralib. triangulari-acut. c. 2 mm lg. Pet. lanceol.-linear. 1/2 mm lt subacut. Lab. glabro.

Eala. Mai 1905 (M. Laurent 685)

Affine du Bulb. bambiliense De Wild.

Megaclinium injoloense De Wild. — Epiphyt. radicib. flex... etc. ad 1,5 mm lt. rhizomate elongato, squamato, squam. caduc. c. 1 cm distantib. Pseudobulb. 7-9 cm lg. 2,5-3,6 cm lt. compress. biangulat. 2foliat. 6-12 cm distantib. basi 2bracteat., bract. papyrac. caduc. c. 6-7 cm lg. Fol. erect. basi ± contract. apice cuneato-rotundat. leviter inaequilateralib 22-28 cm lg. 3,3-4,2 cm lt. ± coriac., scap. erect. 50-70 cm lg. basi c. 9-squamat squam. amplectentib. ± acut. 3-5 cm c. distantib. ad 2 cm lg., rhachi compressa. alato-dilatata, 22-40 cm lga, 1,2-1,5 cm lt. sicca brunnea, bract. triangular. post anthesin reflex. c. 5 mm lg. florib. submedian. 12-13 mm distant Sep. interm. acuto c. 6 mm lgo, lateralib. acut, Pet. lanceol.

? Injolo (Laurent 937, 1748, 2056). (F. Seret 809)

? Dans le groupe B. leptorhachis. Bakossorum, purpurorhachis.

Megaclin. intermedia De Wild. Epiph. radicib. laevib. v. breviter tomentos: usq. 1 mm lt., rhizomate elongato, squamoso, squam. valde c-adn:, pseudobulb. 3,5-5 cm lg., 9-15 mm lt. 3-6 costat. cost. obtus. 2foliat. Fol. erect. basi ± contract. 8-17 cm lg. 4-10 mm lt. apice subrotundat. leviter emarginato-inaequilateralib., scap. erect. 13-20 cm lg. basi 4-5-squamat. squam. 10-13 mm distantib. ± acut. usq. 11 mm lg. amplectentib. rhachi subquadrangulari compressa v subalato-dilatata, ad 15 cm lg., 4 mm lt. rubro-maculata, bract. triangularib. post anthesin refract. 6-7 mm lg. Florib. mediano v. submediano glabr. v. sparse et breviter brunneo-pilos, albido-luteis rubropunctulat. pedicello 2-3 mm lgo, sep. interm. 5-6 mm lg., 2-2,5 mm lt. obovato, apice incrassato, lateral. triangulari-acut. 4-5 mm lg. Pet. elliptic. c. 2,5 mm lg. 0,5 mm lt. Lab. carnosato glabro.
Amadi. (F. Seret 335) - 1905.
Verwandtschaft von M. falcatum.

Megaclin. Jespersoni De Wild. Epiph. radicib. glabr. v. leviter puberul. ad 1,5 mm lt. rhizom. elongato, squamos. Pseudobulb. 5,5-6,5 cm lg. 13-15 mm lt. 3-4-angulat. angul. ± acut. 2foliat. basi bracteat papyrac. c. 5,5 cm lg. caduc. Fol. erect. basi ± contract. 14,5-16 cm lg. c. 15 mm lt. ± coriac. apice rotundat. scap. erect. 12,5-19 cm lg. basi 4-5-squamos. squam. 7-15 mm distantib. ad 10 mm lg. arcte amplectentib. rhachi compressa alato-dilatata 5-12 cm lg. 4-9 mm lt. bract. triangularib. post anthesin refract. ad 5 mm lg. florib. 2-5 mm distantib. excentric. pedicello c. 2,5 mm lg. Sep. intermed. lanceol. acuto extus breviter velutino c. 6 mm lg. 1 mm lt. lateral. extus brevit. velutin. ovato acut. c. 5 mm lg. 2 mm lt. Pet. lineari-acut. c. 3 mm lg., infra ½ mm lt. Lab. ovato subacuto glabro. — Yrela (Jespersen) 1910.
Espèce du groupe B. gobiense De Wild. et congolanum Schlechter

177. Megaclin. Sereti De Wild. — Epiphyt. Radicib. .... griseis 1 m diam, rhizomate elongat. squamoso, pseudobulb. 1,2-7 cm lg. 7-13 m lt. quadrangularib. 1-2,5 cm distant. 2foliat. Fol. erect. basi ± contract. longe obovat. 4-19 cm lg. 1,3-3,2 cm lt. ± coriac. apice leviter inaequilaterali. scap. erect. ad 31 cm lg. basi bracteat. bract. amplectentib. ± acut. 1-3 cm distantib. usq. 12 m lg., rhachi compressa alato-dilatata, 13-20 cm lg., 9-16 m lt. viridirubra, bract. triangularib. post anthesin refract. 3,5 m lg. glabr. Florib. albid. rubromaculat. pedicell. 3,5 m lgo. glabro. Sep. intermedio 4-7 m lg. obovato-spatulato, apice c. 3-4 m lt, leviter emarginato, lateralib. triangul. acut. refract. petal. ovato-elliptic. 1,5-2 m lg. 0,5 m lt. Lab. recurvato c. 2,5 m lg. integro. col. brevi.

River du Bomokandi; Poko. (F. Seret 654) - 1906. — Nala (A. Borne 116) - 1911.

Espèce du groupe B. Lindleyi & B. Fuerstenbergianum

178. Megaclin. Solheidi De Wild. — Epiphyt. radicib. ad 1 m lat. rhizoma. elongat. squamos. Pseudobulbi 2,2-3 cm lg., 6-11 m lt. triangular. cost. acut. 2foliat. 15-20 m distantib. Fol. erect. basi ± contract. 3,5-7,5 cm lg, 5,8 m lt. ± coriac. scap. erect. 5,5-8 cm lg. basi c. 5-squamat. squam. arcte amplectent. ± acut., 5 m dist. 6-8 m lg., rhachi compressa, alato-dilatata, 4-5 cm lg., 4,5-5 m lt., bract. triangularib. post anthesin refract. c. 4 m lg. Florib. medians v. submedians pedicello 2,5-3 m lg. Sep. interm. c. 4 m lg. elliptico-subacuto, apice leviter incrassato, dorso breviter velutino squamoso, lateral. triangular. acut. c. 3 m lg. dorso sparse velutino squamoso. Pet. linear. 3 m lg. Lab. non ciliato.

Environs de Yambuya. (Solheid 78) 1906.

Espèce voisine des B. velutinum et Sandersoni.

/ Megaclin. zobiaense De Wild. — Epiphyt. radicib. — 1 mm lt. rhizoma elongat. squamos. Pseudobulb. 2–4,5 cm lg. 13–17 mm lt. 3–4-angular. c 3 cm distantib. 2foliat. fol. erect. basi ± contract. oblanceol.–elliptic. 9,5–15 cm lg. 7–10 mm lt. apice subrotundat. et ± inaequilateralib, ± coriac. scap. erect. 16–25 cm lg. basi circ. 7-squamat. squam arcte amplectentib. ± acut. 6–15 mm distantib. usq. 9 mm lg. Rhachi glabra compressa, alato-dilatata 7–15 cm lg. 5–8 mm lt, bract. triangularib. post anthesin refract. 3–4 mm lg. Floribus luteol. 3–8 mm distantib. excentric. pedicello c. 2 mm lgo, Sep. dorso breviter velutino-squamulosis, intermed. 4–5 mm lg. 6/10 mm lt, lateralib. acuto-acuminat. c. 3,5 mm lg. Pet. linear. subacut. 3–4 mm lg. & infra 1/2 mm lt. Labello brevi.

Route de Poko à Zobia (F. Seret 874) 1907.

Elle se classe dans le voisinage d. B. congolanum Schlechter & B. Jespersenii De Wild.

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Bulbophyllum acutisepalum De Wild. [Eubulbophyllum]

Epiphyt. radicib 1–1,5 mm lt. rhizomate 2 mm crasso. Pseudobulb. 1–2,2 cm lg. 6–10 mm lt. ovoid. 3–4-costat. 1-foliat. Fol. c. 10–16 cm lg. 10–22 mm lt. apice rotundat. basi contract, scap. suberect. 8–16 cm lg. basi 4–5-bracteat. bract. c. 18 mm distantib. & 11 mm lg. subacut. rhachi 3–9 cm lg. subcylindrica, bract. 4–5 mm lg. pedicello c. 3 mm lg. Floribus albid. sep. subaequalib. longe acuto-acuminat. 6–8 mm lg. basi 3 mm lt. Pet elliptic. c. 2 mm lg. Lab. glabro anguste triangulari oblongo-anguste subacuto recurvato.

Injolo. (M. Laurent 1735, 1740, 2059) 1905.

Voisine des B. flavidum Lindl. et B. aurantiacum Hook. f.
(B. diese letztere Art heisst jetzt B. Gustavi Schlechter)

Bulbophyll. brevidenticulatum De Wild. Bulboph. andongense De Wild. Fl. Bas et Moyen Congo I (1904) 115 non Rchb. f. (1865) – Epiphyt. radicib. filiform. etc. 1-1,5 mm lat. Rhizom. 4-5 mm lt. Pseudobulb. 3,5-5 cm lg. 18-25 mm lt. ovoid. 3-4-angulat. 1foliat. 1-2 cm distantib. fol. 20-24 cm lg. 30-36 mm lt. breviter acuto-apiculat. basi cuneat. coriat., scap. erect. 19-25 cm lg. bract. basilarib. 4-5, vaginantib. subacut. 10-11 mm lg. rhachi subcylindrica 15-20 cm lga, florib. alternantib. v. subverticillat., bract. persistentib. 3-3,5 mm lg. obovat. Sep. subaequalib. ad 10 mm lg. ~~[illegible]~~ et basi 2 mm lt. acut. Pet. oblongo-lanceol. 2-2,3 mm lg. Lab. anguste triangulari, oblongo, subacuto, recurvato, basi breviter denticulata. Col. apice dentata, dentib. recurvatis.

Kinumbi: Sell B. Pipio Rchb. ~~[illegible]~~ (L. Gentil) 1903, Nala. (Boone 105) 1911.

180 Vanilla Sereti De Wild. – Ram. ± incrassat, ad 10 mm lt, foliis in ram. florifer. petiolat. petiolo 10-15 mm lg. ± vaginante, lamina obl.-lanceolata, basi subrotundata, apice acuto-acuminata, 13-[illegible] cm lga, 32-52 mm lata, fol. in ram. sterilib. simillima sed plerumq. 11 lg. 2 cm lt., inflorescent. spicat. axillarib., rhachi 3-7 cm lga, bract. ± dens. 5-6 mm lg. 4-5 mm lt. cymbiformib, patul. subacut., ovario 35-40 cm lgo, 2,5-3 mm lto. Sep. dorsali ellipt. luteolo, 3,4-3,6 cm lg, c. 15 mm lt. sep. later. luteis ± obliqu. 40-42 mm lg. 13-14 mm lat. Lab. albido et rubro. saccato non stipitato, 25-[illegible] lgo, obscure v. non lobato, margine undulato, medio leviter recurvato, disco appendice retrorso ± lobato, scarioso munito. Gynost. apice usq. c. labello connato, anthera biloculari, basi subrotundato-truncato.

Environs de Nala. (F. Seret 756), envir. de Arébi (F. Seret 714), Nala (A. Boone 111), Libenghe (Mertdagh 59)

Voisine de V. Chalotii Finet.

Angraecum albido-rubrum De Wild. Epiphyt. Caule brevi v. 0, radic. ± ramos. ad 2 mm lt. Fol. basilarib. 3-5 rosulat. lanceol. falciformib. basi et apice contract. apice ± 2lobat. lob. 2-5 mm distantib. lamina 6-11 cm lg. 11-12 mm lt., infloresc. racemos. 25-36 cm lg. florib. 16-18 albid. et rubr. bract. inferiorib. vaginantib. superiorib. florifer. subpetal. c. 3 mm lg. 8-17 mm distantib. pedicello glabro 10-11 mm lg. Sep. dorsali elliptico-obovato integro 14-15 mm lg, 6-7 mm lt. lateralib. similib. c. 15 mm lg. 6-7 mm lt. Pet. sepalis similib. apiculat., 15-18 mm lg., 6-8 mm lt. Lab. integro elliptico acuto, 18-22 mm lg, 12-14 mm lt. calcar basi ... vato, apice erecto 30-35 mm lg. munito. Col. subalata, apice denticulata. Entre Kembele & Galia (F. Seret 190), environs de Suronga (F. Seret 190 bis) envir. de Nala (Boone 97), envir. de [illegible] (Leocrauwaet 325)
Espèce affine des A. rhodosticta Kränzl. et luteo-album Kränzl.

Angraec. acutoemarginatum De Wild. — Epiph. Caule lignoso 181.
± compresso 4-5 mm lt. Fol. altern. 8-16 mm distantib., 11-14 cm lg. 6-8 mm lt. lamina apice ± lobata, lob. acut. 10-15 mm distantib. sinu acuto, vagina stipulata, stipula setacea 3-5 mm c. longa, infloresc. axillarib. racemos. 10-15 cm (mm?) lg., florib. bruneol. 2-4 mm distantib. bract. 1-1½ mm lg. pedicello glabro, c. 2½ mm lg. Sep. dors. lanceol. subacute, integro 3-3½ mm lg. sep lateral. ovato-lanceol. dorsali subaequilg. Pet. ovato-lanceol. 2½-3 mm lg. Lab. 3lobato c. 3 mm lg. calcar. recto c. 7-8 mm lg. Col. brevi rostello acuto. — Eala (M. Laurent 1214) 1905.
Esp. voisine des A. stipulatum De Wild. et inaequilongum De Wild.

Angraec. angustifolium De Wildem. [Listrostachys De Wild.] Ram. ± elongat, radicib. numeros. ad 2-3 mm lt. Fol. linearib. apice ± profunde bilobat. lob. 1½-2 mm distantib. lamina 13-17 cm lg. 5-8 mm lt. Infloresc. racemos. axillarib. 3-5 cm lgis, c. 6-floris, florib. albid. altern., bracteis 7-8 mm lg. 10-12 mm distantib. pedicello glabro, 14-16 mm lg. Sep. petq. c. 10 mm lg. Lab. triangulo-elongato c. 12 mm lg. margine undulato sed non lobato, in calcar apice recurvat. 12-26 mm lg. transeunte. Col. brevi, rostello acuto, 2lobato

apice vaginata, anthera obovata, antice emarginata ± biloba, pollin globulos. caudicul. usq. basin distinct, glandul. subcordat. caudicul. brevioribus. — Eala (Seret 1001). — Espèce du groupe Ang. Chailluanum, arcuatum

182. Angraec. Bieleri De Wild. Epiphyt. aphylla, ram. brevib. 1,5–3 cm lg. radicib. numeros. ramos. ad 3 mm lt. Infloresc. axillarib. racemos. ad 3½ cm lg. florib. altern., bract ovato-acut. ± vaginantib. 1–1,5 mm lg. 1–1,5 mm distantib. pedicello glabr. gracili 10–12 mm lg. Sep. integr. posteriore obovato, obt. 4,5 mm lgo, lateralib. ovato-obliqu. c. 5 mm lg. Pet. obovat. obt. 4 mm lg. Lab. brevi, ovato v. lanceol. 3–3,5 mm lgo, margine integro v. leviter undulato, calc. recto basi et apice leviter inflato, anthera ovata, cordata, subacuta, pollin. 1-stipitatis.
Haut-Lopori (Bieler). Eala (M. Laurent 1780)
Affine Angr. crinale De Wild. (A. micropetalum Schlechter)

Angraec. bokoyense De Wild. — Ram. 4–7 mm crass. radicib. elongat ± ramos. Fol. c. 10 mm distantib. vagina c. 10 mm lg. lamina obl. v. ovato-ellipt. basi rotundata v. subcord. apice inaequal. 2loba. lob. 5–7 mm distantib. 3,5–7 cm lg. 11–20 mm lt. Infloresc. racemosa 15–25 cm lg. bract. c. 8 subpalul. concav. rigid. triangul.-ovat. subacut. v. obt. c. 3–4 mm lg. et 4 mm lt. rhachide valde angulosa, florib. albido-luteol. pedicell. c. 5 mm lg. Sep. integris, posteriore ovato-lanceol. acuto, 7–8 mm lgo, lateralib. subsimilib. v. latiorib. Pet. sepal. breviorib. 3-nerv., apice rotundato-apiculat. Lab. 3lobo c. 11 mm lg. lob. lateral. rotundat. lob. mediano ovato-obl. undulato, emarginato, calcar 7 mm lg. conico versus apice appendiculo ovoideo 4–5 mm lgo munito. Col. brevi. anthera subcirculari subacuta, rostell. brevi- biloba dilatat acut. pollin. 1-caudiculat. glandula unica. — Bokoyo. (Seret 610), Nala (Roone 109) — Aff. A. zigzag

183. Angraec. Boonei De Wild. — Ram. compress. vagin. folior. persistentib. fol. ovato-lanceol. 3–6.5 cm lg. 12–16 mm lt. ± profunde 2lob. lob. rotundat. 9–12 mm distantib. Infloresc. racemos. axillarib. 1-flor. (?) usq. 2,5 mm lg. bract. c. 4 mm lg. pedicello glabr. c. 15–16 mm lg. Sep. lanceol.-linear. acut. integr.

12-13 mm lg. usq. 2 mm lt. Pet. linear. c. 10 mm lg. Lab. ovato acuto 12 mm lg. margine integro, glabro, calcar. ± recurvat. apice inflato 1,5 cm lg. Col. brevi. — Envir. de Nala (A. Boone 100). — Voisine A. angustipetalum Rendle

Angraec. canaliculatum De Wild. [Listrostachys D. Wild.] Ram. gracilib. ± elongat. ad 35 cm lg. ramos. ramuscul. infra 2 mm lt. Fol. linear. distantib. subcylindric. profunde canaliculat. subulato-acut. 7-10 mm lg. 1,5-2,5 mm lt. transverse rugos. vagina rugosa c. 15-20 mm lg. Florib. albid. solitarib., bract. bruneis subcariosis, pedic. 3-4 mm lg. Sepal. integr. postico lanceol.-obl. subacuto. 5-5½ mm lg. lateral. elliptic. subobliqu. c. 5 mm lg. Pet. sep. subaequalib. angustiorib. Lab. elliptico 5 mm lg. apiculato, lob. lateral. rotundat., calcari recto, medio leviter inflato apice ± abrupte contracto, subacut. 5 mm lgo. Col. c. 2 mm lg. apice lateraliter subulata. anthera subovato-conica, glabra, rostell. paulo prominens poll. basi uniglandulos. glandula reducta.
Ingolo. (M. Laurent 1767). Eala (L. Pynaert 477)
Espèce affine de l'A. subulatum.

184.

Angraec. Claessensi De Wild. — Ram. elongat. applanat. ramos. ultra 30 cm lg. Fol. obovato-elliptic. 6-11 cm lg. 2,-3,3 cm lt. apice ± profunde emarginato-2lob., lob. rotundat. 3-5 mm distantib. Inflorsc. racemos. axillarib. vulgo solitari. 15-30 cm lg. ± ramos., florib. c. 8 altern. bract. c. 3 mm lg. subpatul. 15-45 mm distantib., pedic. glabro 10 mm lg. Sep. integr. dorsali ovato-lanceol. acuto. 9-10 mm lg. 3 mm lt., lateralib. subsimilib. Pet. 8-9 mm lg. Lab. subglobo 7 mm lt. 8 mm lg., apiculato. apiculo recurvato, margine leviter undulato, calc. recto. basi subinfundibuliformi. medio stessus abrupte contracto, vers. apicē levit. inflato c. 5 mm lg. Col. brevi rostello bipartito, anth. subquadrata, poll. subsessilib. glandula sublata.
Barono. (J. Claessens 748) — Nomen indig. Rangi.
Voisine des A. Schimperianum et Mofakoko De Wild.

Angraec. cordaliglandulu De Wild. [Listrostachys cord. De Wild.]
Epiph. ram. brevib. radicib. ± crass. ad 3-4 m lt. Fol. equitantib. levit. recurvat. acut. c. 4-12 cm lg. 3,5-5,5 m lt. longitudinaliter striat. racem 3,5-10 cm lg. 9-14-flor., bract. late ovat. ± cucullat. subobtus. 4-6 m lg. 5-7 m distantib., pedicello brevit. tomentoso. Florib. albido-luteol. odorat. sep. integr., dorsali ovato-elliptico subobt. c. 6,5 m lg. lateral. paulo longiorib. subacut. Pet. brevioribus. Lab. subquadrangulari c. 6,5 m lg. et lt., brevit apiculato, apice subobt., calcari basi subcrasso, apice acuto, medio vers. abrupte recurvato. c. 12 m lg. Col. brevi, rostell. brevi-2fid. glandula basi cordata apice acuta, stipites 2.
Environ. de Nala (F. Seret 754) - Voisine de Angr. stipulatum Rchb. f.

185. Angraec. deflexicalcaratum De Wild. - Epiph. aphyllu, ram. brevib. ad 2 cm lg., radicib. numeros. laevib. ramos. 2-2½ m crass. Infloresc. axillarib. racemos. ad 16 cm lg. Florib. altern. bract. vaginantib. 2-3 m lg. 5-10 m distantib. pedic. glabr. gracili 10-13 m lg. Sep. integr. dorsali ellipt. subobtuso, apiculato, lateralib. obovat. leviter oblig. c. 5 m lg. Pet. c. 2,5 m lg. Lab. brevi c. 2 m lg. margine integro, Calc. mediu versus recurvat. basi inflat. medio contract. apice inflat. Col. sublonga apice recurv., rostell. subacut. 2fid. anthera ovato-acuta, pollin 1-stipitat. caudicula apice lato subcordato. - Injolo et Eala (M. Laurent 1776)

Angraec. ealaense De Wild. [Listrostachys eal. De Wild.] Ram. ± elongat. subcrass. Fol. lin.-lanceol. apice ± profunde 2lob. lob. 1,5-3 m distantib. lamina 1,9-4 cm lg. 28-40 m lt. Infloresc. axillarib. racemos. 20-30 cm lg. c. 20 flor. Fl. albi, odorati, bract. 5-8 m lg. 5-10 m distant. pedic. 7-10 m lg. Sep. et pet. subaequilg. c. 11 m lg. Lab. triangul. subacuminat. 7-8 m lg. margine levit. undulatu, calcar rectu 25-26 m lg. Col. brevi, anth. ovato-acumin. rostell. elongat. subulat. 2fid. lob. acut., caudicul. ung. ad basin liberis, glandula caudic. subaequilg. basi emarginata, apice integra. - Eala (M. Laurent 1784) 1905.
Espèce voisine de l'A. injoloense De Wild.

Angraec. erecto-calcaratū De Wild. – Epiphyt. ram. ad 4 cm lg. radicib. numeros. gracilib. ad 2 m lt. Fol. 5-6 linear.-lanceol. subfalcat. apice ± profunde 2lob., lob. 3-8 m distantib. 9-15 cm lg. 11-16 m lt. basi & apice contract. Infloresc. axillarib. racemos. ad 6 cm lg., florib. ± numeros. bract. vaginantib. ovat. subpatul. c. 2 m lg. 1,5-3 m lt. distantib., pedic. patulo erecto 3 m lg. Sep. integr. lateralib. dorsali angustiorib. et longiorib. 2,8-3,2 m lg. 1,3-1,7 m lt. Pet. late obovato-subcircularib. c. 2,4 m lg. Lab. subquadrangul. integro, margine undul. c. 3,5 m lg. & lt. calc. erecto c. 13 m lg. Col. brevi, rost. apice subinflato, anthera bilobulata. – Eala. (F. Seret 1004) Voisin de l'Angr. lepidotum Rchbf.

Angraec. fimbriatipetalū De Wild. – Ram. elongat ± cylindr, ad 5 m crass. radicib. ramos. 2-3 m crass. Fol. ellipt. 6-11 cm lg. 14-21 m lt. apice ± profunde bilob. lob. 4-7 m distantib. Infloresc. racemos. axillar. 6-10 cm lg. bract. brevit. vaginantib. ± patulo-refract. 2-3 m lg. 5-7 m distantib. pedic. 7-9 m lgo, sep. dors. elliptico, integro v. apice levit. emargin. 5-6 m lgo, sep. lateral. triangulo-obliq. 5-6,5 m lg., c. 2 m lt. Pet. 4-5,5 m lg. 1 m lt. fimbriatis. Lab. 3lobo. 6-7 m lg. basi auriculato, lb. mediano triang. margine ciliato, lob. later. ± profunde fiss. fimbriat. disco velutino calc. rect. c. 2 cm lg. Col. brevi, caudicul. 2 infra coalitis. – Août 1905. Injolo (M. Laurent 1783). – Voisine de l'A. fimbriatū Rendle.

Angraec. globuloso-calcaratū De Wild. – Epiph. Ram. gracilib. ± applanat. ad 7 cm lg. radicib. numeros. ± ramos. et ad 2 m crass. Fol. apice ± profunde 2lob., lob. 2-5 m distant. lamina 3,5-11,5 cm lg. 7-10 m lt. Infloresc. racemos. axillarib. ad 10 cm lg. c. 6 flor. florib. albid., bract. subpatul. ovato-subacut. c. 1 m lg., 1 m distantib., pedicello 2-2½ m lg. Pet. elliptico-subobt. c. 1,5 m lg. Sep. integr. dorsale lateralib. paulo majore, lateralib. late ovat. obtus. 2,2-2,5 m lg., Lab. 1,5 m lg., 2,5-3 m lt. margine undulato, calcar crasso, apice inflato-globuloso, levit. recurvato, 2-2½ m lg. et c. 1 m lt. rostello antice recurvato. Entre Buta et Zobia. (F. Seret 871) – Aff. A. clavato Rolfe et Wakefieldii; une variété „angustifolium" De Wild. existe à Magdangba (F. Seret 582) 1906.

187. Angraec. inaequilongū De Wild. – Ram. ± compress. 2,5-4 m̄ cras. elongat. Fol. lanc.-linearib. 5-14 cm lg 4-7 m̄ lt. basi mistipulat. stipula styliformi 5-6 m̄ lg. lamina ± profunde 2lob. lob. rotundat 9-14 m̄ distan; sinu nullo. Infloresc. racemos. solitarib. v. fasciculat. 10-17 m̄ lg. Florib. lax. bract. ovato-ellipt. c. 2 m̄ lg. 2-4 m̄ distantib. pedic. c. 3 m̄ lg. Sep. integr. dors. ovato-acuto 3.-3,5 m̄ lg. lateral. similib. paulo latior. Pet. c. 3 m̄ lg. lanc. acut. qu. sep. levit. angustiorib. Lab. 3lobo 2,5-3 m̄ lg. lob. mediano triangul.-acuto, integro, lob. later. subfiliformib, calcari recto 7-8 m̄ lg. Col. brevi, rost. brevi. – Injolo. voisin de A. stipulatū De Wild. et A. acutoemarginatū De Wild. – (M. Laurent 2044) 1905.

Angraec. injoloense De Wild. (Listrostachys injol. De Wild.) Fol. ellipt. lanceol. apice ± profunde bilol. lob. rotundat. 8-10 m̄ distantib. lamina 16-26 cm lg. 2,6-3,5 cm lt. Infloresc. racemos. 14-20-flor. 17-20 cm lg. bract. c. 6-8 m̄ lg. 7-20 m̄ distantib. pedic. 7-8 m̄ lgo. Pet. c. 7 m̄ lg. Lab. triangul. angusto, 7-8,5 m̄ lg. undulato, calc. rect. apic levit. lobulat. 20-22 m̄ lg. Col. brevi, anth. ovata, rost. elongato 2fido lob. subulat. pollin. bicaudiculat., caudicul. glandulis breviorib. glandula elongata, basi et apice 2loba. – Injolo (M. Laurent 1756) 1905. Espèce du groupe A. Chailluanū, arcuatum.

188. Angraec. latibracteatū De Wild. (Listrostachys latibr. De Wild) Ram. ± elongat. ramos. v. simplicib. radicib. numeros. ramos. Fol. ellipt.-lanceol. apice ± 2lob. lob. 2,5 m̄ distantib. lamina 6-10 cm lg. 1,2-1,9 cm lt. Infloresc. racemos. 7-8 cm lg. erect. 9-16-floris. Florib. alb. odorat. bract. 6-10 m̄ lg. 2-3 m̄ distantib. pedic. 4-5 m̄ lgo. Sep. integr. ovato-lanceol. subacut. 9-12 m̄ lg. Pet. qu. sep. paulo breviorib. Lab. 9 m̄ lgo. calcari recurvato 20-25 m̄ lgo. Col. brevi rost. elongato 2fido, caudicul. 2 usq. ad basin liber. glandula caudiculis subaequilg. apice 2dentata.
Kiravunga (J. Seret 194), Yambuya (M. Laurent 1758), Injolo (M. Laurent 1773) – Voisin de l'A. injoloense et calcarse du groupe A. Chailluanū, arcuatum.

Angraec. moandense De Wild. Epiphyt. ram. brevib. 10 cm lg. radicib. numeros. c. ± 2 m̄ crass. Fol. c. 8 m̄ distantib. 4-5 cm lg. 4-9 m̄ lt. obl. profunde emargin. sinu ± acuto, arg. 8 m̄ lgo. racem. erect. v. patul. solitariir v. geminat. 2-3 flor. 2-2½ m̄ lg. bract. ovat. c. 2 m̄ lg. pedicell. 6-7 m̄ distantib. 10-12 m̄ lg. Sep. pet. que c. 10 m̄ lg. calcari apice leviter recurvato, inflato gracili c. 15 m̄ lg.
Environs de Moanda (J. Gillet) 1907. – Voisin de A. alcicorne, Kirkii, Rohlfsianum

Angraec. Mofakoko De Wild. – Ram. ± elongat, compress. 189.
radicib. numeros. ramos. c. 1.5 m̄ lat. Fol. lanceol. v. subobovat. apice ± profunde bilob., lob. rotundat. 4-5 m̄ distantib. lamina 7-14 cm lg. 1,5-3 cm lt. Inflorescent. racemos. axillarib. solitar. v. 2-3 nir. 4½-6 cm lg. 1-v. 2-flor. bract. ad 3.5 m̄ lg. et 2.5 m̄ distantib. ± vaginantib. pedic. 10-13 m̄ lg. Sep. integr. dorsali lanceol.-ellipt. 15-19 m̄ lg. 5 m̄ lt. lateralib. paulo minorib. Pet. lanceol. acut. 1,5 cm lg. Lab. ovato-acuto c. 11 m̄ lg. 8 m̄ lt. margine undulato, disco 3-nervio, nervis elevat. calcari levit. recurvato c. 2,2 cm lg. mediu vers. contract. apice levit. inflato. Col. brev. rost. 2lobato lob. levit. divergentib. caudicul. brevib. basi coalitis.
Gazi (J. Claessens 7/12) – Nom. ind. Mofakoreo. – Voisine de l'A. Claessensi De Wild.)

Angraec. nalaense De Wild. – Ram. gracilib. elongat. ± compress. ad 20 cm lg. radicib. numeros. ± ramos. c. 1 m̄ lt. piloso-squamos. Fol. 5-9 m̄ distantib. obovat. v. ellipt. apice ± profunde bilob. lob. 1-2 m̄ distantib. lamina 13-23 cm lg. 5-7 m̄ lt. Infloresc. axillarib. florib. solitar. pedic. glabro c. 12-13 m̄ lg. Sep. integr. dorsali ovato-acuto 7 m̄ lg., lateral. subobliqu. dorsali subaequilg. Pet. ellipt.-subacut. 6 m̄ lg. Lab. ovato-acuto 6 m̄ lg. obscure 3lob. margine integro, calcari recto gracili 4-4,2 cm lg. apice non inflato. Col. brev. anth. semicircul. subacuta.
Environ. de Nala (A. Boone 107). Voisine de A. lepidotum

Angraec. Reygaerti De Wild. – Ram. ± elongat. compress. 190.
Fol. obovato-lanceol. apice ± profunde bilob. lob. rotundat. 5-7 m̄ distantib. lamina 15-16 cm lg. 3-3,5 cm lt. infra angustiore. Infloresc. racemos. axillarib. geminat. v. solitar. rhacide 10-11 cm lgo, ± ramosa, bract. subvaginantib. 3-4 m̄ lg. distantib., pedic. 2-2½ m̄ lg. Sep. dors. lanceol. 1,5 cm lg. lateral. subaequal. Pet. lanc. 3-3½ cm lg. et 1,5 m̄ lt. Lab. lanceol. acuto 3,4 cm c. lgo, 6 m̄ lt. calc. 7 cm lg.

anguste infundibulif. apice subinflato. — Mobwasa (F. Rygaert 1104) 1913.
Esp. du groupe A. Eichlerianu. – Arnoldianū.

Angraec. roseocalcaratū De Wild. — Epiph. Ram. brevib. c. 1 cm lg. radicib. numeros. c. 1-2 mm diam. Fol. 4-6, lamina 4-4½ cm lg. 4-10 mm lt. lanceol. basi contracta apice 2lobo-emargin. racem. erect. v. patul. c. 5-flor. ad 7 cm lgis. bract. ovat. 2-3 mm lg. pedicell. 10-17 mm distant. 12-18 mm lg. Florib. alb. odorat. Sep. & pet. lanceol. acut. 10-15 mm lg. Lab. petal. subaequilg. calc. gracili 4,5 cm lg. roseo, apice vers. levit. recurv. apice paulo inflatū.
Entre Zobia et Buta. (F. Seret 889), entre Buguet Poko (F. Seret 462) 1906 a. 7.
Voir. du A. saukurense De Wild. et monadense De Wild.

Angraec. saukurense De Wild. — Ram. brev. 2 cm lg. radicib. gracilib. 1-2 mm diam. Fol. 6-7, lamina 7-7,5 cm lg. 4,5 mm lt. lanceol. apice breviss. 2lobo-emarginata, lob. rotundat. racem. erect. c. 6-flor. rhachi c. 6 cm lgo, bract. ovat. c. 2 mm lg. florib. albid. Sep. pet. q. elliptico-acut. c. 10 mm lg. Lab. sep. subaequilg. acuto, calc. gracili apice leviter ~~inflato~~ recurv. et paulo inflato. ~~Entre Zobia~~ 4,5 cm lgo.
Saukuru (Ed. Luja) 1909. — Espèce du groupe du A. Rohlfsianū Kränzl et aff. du A. roseocalcaratū De Wild.

191. Angraec. Sereti De Wild. (Listrostachys Ser. De Wild.) — Ram. ± elongat. radicib. ad 3-4 mm lt. Fol. lanceol.-linear. apice ± profunde bilob., lob. 7-10 mm distantib. lamina 11-17 cm lg. 9-14 mm lt. Infloresc. racemos. axillarib. 6-11 cm lg. 7-9-flor. florib. albid. odorat. bract. 12-15 mm lg. 5-10 mm distant. pedic. 2,2-3 cm lg. Pet. c. 16 mm lg. sep. ad 2,6 cm lg. Lab. triangul. acuto 2 cm c. lg. margine levit. ... calcari apice ± recurv. 6-6,5 cm lg. Col. brevi, anth. ovato-elongat., rost. 2fid., poll. 2candicul. glandula unica stipitis brevior, apice breviter emarginata basi in appendicē hyalinū caducū elongata.
Env. de Surongo (F. Seret 666) 1906. — Voir. de A Whytei D. Wil. (Listrostach. Wh. Rolfe)

Angraecū Solheidii De Wild. (Listrostachys Solh. De Wild.) — Ram. brevis, radicib. numeros. ramos. ± velutin. fol. linear. apice breviss. 2lobat. v. subintegr. subrotund., lamina 12-20 cm lg. 1-2 cm lt. Infloresc. aut. racemos. axillarib. 11-25 cm lg., 10-16-flor., bract. 3-6 mm lg. 4-15 mm distantib. inferiorib.

vaginantib. sterilib. pedic. 1,5–2,5 cm lgo. Pet. 6–9 mm lg. Lab. ovato ± acuto, 7–9 mm lg. margine undulato, calcari erecto, gracili, 7–11 mm circ. lg., rost. subulato longe 2lobo, pollin. bicaudiculat, glandula trapezoidali-elongata, caudicul. medium urg. aequalib. pollin. globulosis. Nala. (Boone 95. 99. 108. 109. 110), Dundusana (Mortehan 163 & de Giorgi 1018), Yambuya (M. Laurent 1028 & Solheid 6. 127).
Esp. voisine de l'A. Englerianum Kränzl. — *Angraec. subcylindrifolium* De Wild. (Listrostachys) Ram. ± elongat. radi- **192.** cib. numeros. ± ramos. ad 3 mm lt. fol. linear. apice obscure 2lobat. lob. maxim. 1 mm distant. 15–20 cm lg. 2,5–3,5 mm lt. subcylindrico-crass. Infloresc. axillarib. racemos. 4,5–6 cm lg. 6–7-flor. bract. 7–10 mm lg. 5–6 mm distantib. pedicell. 13–14 mm lg. Pet. 10 mm lg. Sep. urg. 12–14 mm lg. Lab. triangul. acuto, non undul. -lobato, 10 mm circ. lg. calc. apice recurv. 12–16 mm lgo., rost. brevi, subulato, trifido, apice lamina recurvata caduca munito, anth. subcirculari, pollin. bicaudiculat. caudicul. glandula apice emarginata longiorib. — Envir. de Nala (Boone 113, 115)
Voisine de l'Ang. angustifolium De Wild.

Angraec. subfalcifolium De Wild. — Ram. brevib. ad 5 cm lg. radicib. numeros. ± ramos. ad 1,5 mm lt. Fol. obovato-ellipt. basi contract. apice ± bilob. lob. rotundat. 5–8 mm distant. lamina 8,5–17 cm lg. et 1,5–2 cm lt. Infloresc. axillarib. racemos. 10–22 cm lg. bract. vaginantib. c. 2 mm lg. 3–4 mm distantib. pedic. 3–4 mm lgo. Sep. dors. ovato acut. c. 6–7 mm lg. lateral. 8 mm lg. basi inaequilateral. Pet. lanc. c. 6 mm lg. Lab. subpanduriformi 7 mm lg. 6 mm lt. medium vers. contracto, margine undulato, obscure apiculato calc. recurvat. c. 7 mm lg., rost. acuto levit. recurv. pollin. 1-stipitat., caudicula recurv. gracili, basi glandulosa.
Dundusana. (Mortehan 909), région de Monna (Jespersen)
Espèce voisine des A. Dorotheae Rendl. et A. bidens (Afzel.) Rolfe = A. bidens (Afzel.) Engler.

Beendet am 3 Januar 1928.

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